



DRAFT

## **Software User's Guide for**

---

# **Electronic Commerce Processing Node**

**Version 2.2**

**May 1999**

Inter-National Research Institute, Inc.  
12350 Jefferson Avenue, Suite 400  
Newport News, Virginia 23602

SUG for ECPN Version 2.2

The following trademarks and registered trademarks are mentioned in this document. Within the text of this document, the appropriate symbol for a trademark (™) or a registered trademark (®) appears after the first occurrence of each item.

Acrobat is a registered trademark of Adobe Systems Incorporated.

CLEO is a registered trademark of Interface Systems, Incorporated.

Kermit is a registered trademark of Henson and Associates, Inc.

Netscape and Netscape Navigator are registered trademarks, and Netscape Enterprise Server is a trademark of Netscape Communications Corporation.

Oracle is a registered trademark of Oracle Corporation.

UNIX is a registered trademark of The Open Group.

Copyright © 1999  
Inter-National Research Institute, Inc.  
All Rights Reserved

This material may be reproduced by or for the U.S. Government pursuant to the copyright license under the clause at DFARS 252.227-7013 (NOV 1995).

# Software User's Guide for ECPN

## Contents

---

### Section 1 Introduction 1-1

- 1.1 System Overview 1-2
- 1.2 Document Overview 1-11
- 1.3 Common Tasks 1-13
  - 1.3.1 Working with Menus 1-14
  - 1.3.2 Working with Windows 1-18
  - 1.3.3 Working with Data 1-20
  - 1.3.4 Performing Common User Tasks 1-25
- 1.4 Documentation Conventions 1-28

### Section 2 System 2-1

- 2.1 System Setup 2-2
- 2.2 System Log 2-6
- 2.3 Archive/Restore 2-8
- 2.4 Close All 2-12
- 2.5 Exit 2-13

### Section 3 Messages 3-1

- 3.1 Message Log 3-2
- 3.2 Error Queue 3-18
- 3.3 Outgoing Email Queues 3-23
- 3.4 Rejected Email 3-27
- 3.5 Incoming X12 Queue 3-30
- 3.6 Incoming Translation Queue 3-33
- 3.7 Outgoing Translation Queue 3-35

### Section 4 Communications 4-1

- 4.1 Communications Manager 4-2
  - 4.1.1 General Channel Settings 4-24
  - 4.1.2 Translation Mapping for UDF Messages 4-27
  - 4.1.3 Administration Settings 4-34
  - 4.1.4 Character Conversion Settings 4-37
  - 4.1.5 Channel POC Information and Notes 4-42
  - 4.1.6 CLEO Settings 4-43
  - 4.1.7 Email Settings 4-46
  - 4.1.8 FTP Settings 4-50

4.1.9	Kermit Settings	4-59
4.1.10	ZMODEM Settings	4-62
4.1.11	Command File for CLEO, Kermit, and ZMODEM Channels	4-65
4.2	Communications Status	4-67
Section 5 Databases 5-1		
5.1	Routing DB	5-2
5.2	Trading Partner DB	5-8
5.3	Message DB	5-14
Section 6 Alerts 6-1		
6.1	Alert Log	6-2
6.2	Alert Display Filter	6-6
6.3	Alert Notification DB	6-9
6.4	Alert Notification Message	6-13
Section 7 Misc 7-1		
7.1	Process Logs	7-2
7.2	Time Zone Conversion	7-4
Section 8 Help 8-1		
8.1	ECPN Homepage	8-2
Appendix A Dial-up Communications A-1		
A.1	Default Kermit Script File	A-2
A.2	Default ZMODEM Script File	A-8
A.3	Default CLEO Script File	A-13
Appendix B Alerts B-1		
Appendix C Viewing Pre-2.0 Message Archives C-1		
Appendix D Searching Messages D-1		
Appendix E Sending Information to the Data Warehouse E-1		
Appendix F Sample Traffic Report F-1		
Appendix G Routing Documents to the EDA Server G-1		
Appendix H Importing Data from Spreadsheets H-1		
Appendix I Viewing COOP Data I-1		
Index Index-1		

## List of Figures

Figure 1.1-1	Message Exchange	1-2
Figure 1.1-2	Processing Path of an Incoming X12 Message	1-4
Figure 1.1-3	Processing Path of an Outgoing X12 Message	1-6
Figure 1.1-4	Processing Path of an Incoming UDF Message	1-7
Figure 1.1-5	Processing Path of an Outgoing UDF Message	1-9
Figure 1.3-1	Main Menu Bar	1-14
Figure 1.3-2	Pull-down Menu	1-14
Figure 1.3-3	Pop-up Window	1-15
Figure 1.3-4	Window Pull-down Menu	1-16
Figure 1.3-5	Communications Status Window	1-18
Figure 1.3-6	Tabs	1-19
Figure 1.3-7	Drop-Down List Box — Closed and Opened	1-21
Figure 1.3-8	Search Window	1-22
Figure 1.3-9	Search Window	1-23
Figure 1.3-10	Select Host Dialog Box	1-24
Figure 1.3-11	Select Log Date Dialog Box	1-25
Figure 1.3-12	PRINTER Window	1-26
Figure 2.1-1	System Setup Window: Site Tab	2-2
Figure 2.1-2	System Setup Window: Translation Tab	2-4
Figure 2.1-3	System Setup Window: Admin Tab	2-5
Figure 2.2-1	System Log Window	2-6
Figure 2.3-1	Daily Archive - Restore Window	2-9
Figure 2.3-2	RESTORE RESULTS Window	2-11
Figure 3.1-1	Message Log Window	3-2
Figure 3.1-2	Edit Requested Record Dialog Box	3-4
Figure 3.1-3	Raw Viewer	3-5
Figure 3.1-4	JDS Viewer	3-6
Figure 3.1-5	Annotation Editor Window	3-12
Figure 3.1-6	TRANSLATION TOOLBOX Window	3-13
Figure 3.1-7	Translation Audit Window	3-14
Figure 3.2-1	Error Queue Window	3-19
Figure 3.3-1	Outgoing Email Queues	3-23
Figure 3.3-2	Edit Domain Threshold Window	3-26
Figure 3.4-1	Rejected Email Window	3-27
Figure 3.4-2	View Message Window	3-28
Figure 3.5-1	Incoming X12 Queue Window	3-30
Figure 3.6-1	Incoming Translation Queue Window	3-33
Figure 3.7-1	Outgoing Translation Queue Window	3-35
Figure 4.1-1	Communications Manager	4-3
Figure 4.1-2	View Columns Window	4-5
Figure 4.1-3	Folder Hierarchy Setup	4-6
Figure 4.1-4	Folder Hierarchy	4-7

Figure 4.1-5	Session Log Window	4-9
Figure 4.1-6	In Channel Log Viewer	4-10
Figure 4.1-7	SAVE FILE Window	4-11
Figure 4.1-8	Channel File Viewer	4-12
Figure 4.1-9	Search File Text Window	4-13
Figure 4.1-10	Out Channel Log Viewer	4-14
Figure 4.1-11	Channel File Viewer	4-16
Figure 4.1-12	Out Channel Queue Viewer	4-18
Figure 4.1-13	Add Channel Window	4-21
Figure 4.1-14	Edit Channel Window: GENERAL Tab	4-24
Figure 4.1-15	Communications Scheduler	4-26
Figure 4.1-16	Edit Channel Window: TRANSLATION Tab	4-27
Figure 4.1-17	Translation Look-up Table	4-30
Figure 4.1-18	List of Format Specifications for a Selected UDF	4-32
Figure 4.1-19	Specifications Document in PDF	4-33
Figure 4.1-20	Edit Channel Window: ADMIN Tab	4-34
Figure 4.1-21	Edit Channel Window: CONVERSION Tab	4-38
Figure 4.1-22	Edit Channel Window: NOTES Tab	4-42
Figure 4.1-23	Edit Channel Window: CLEO Tab	4-43
Figure 4.1-24	Edit Channel Window: EMAIL Tab	4-47
Figure 4.1-25	Edit Channel Window: FTP Tab	4-50
Figure 4.1-26	Edit Channel Window: FTP TRANSFER Tab	4-52
Figure 4.1-27	Edit Channel Window: KERMIT Tab	4-59
Figure 4.1-28	Edit Channel Window: ZMODEM Tab	4-62
Figure 4.1-29	Edit Channel Command File Window	4-66
Figure 4.2-1	Communications Status Window	4-67
Figure 5.1-1	Routing Database Window	5-3
Figure 5.1-2	Add Routing Window	5-5
Figure 5.2-1	Trading Partner Database Window	5-9
Figure 5.2-2	Add Trading Partner Window	5-10
Figure 5.2-3	Transaction History	5-12
Figure 5.3-1	Message Database Window	5-15
Figure 5.3-2	Message Database Window (With Search Results)	5-17
Figure 5.3-3	Transactions Window	5-18
Figure 5.3-4	Days On-Line Window	5-20
Figure 6.1-1	Alert Log Window	6-2
Figure 6.1-2	Urgent Alert Window	6-4
Figure 6.1-3	Non-Urgent Alert Window	6-5
Figure 6.2-1	Alert Display Filter Window	6-6
Figure 6.2-2	Edit Alert Filter Window	6-7
Figure 6.3-1	Alert Notification Database Window	6-9
Figure 6.3-2	Edit Alert Notification Action Window	6-10
Figure 6.4-1	Edit Alert Notification Message Window	6-13

Figure 7.1-1	Process Logs Window	7-2
Figure 7.1-2	Process Log Window	7-3
Figure 7.2-1	DTG CONVERSION Window	7-4
Figure 8.1-1	ECPN Homepage	8-2
Figure 8.1-2	ECPN Homepage Channel Status Window	8-3
Figure C.0-1	Incoming Archive Viewer	C-2
Figure C.0-2	Incoming 1.0.8 Logs Window	C-3
Figure C.0-3	import_msg_list108.sh Window	C-6
Figure C.0-4	Archive Directory Selection Window	C-7
Figure G.0-1	Routing of Documents from SPS to the EDA Server	G-1

## List of Tables

Table 1.1-1	Possible Message-Processing Paths	1-3
Table 1.1-2	MSN Format	1-5
Table 1.3-1	Common Shortcut Keys	1-17
Table 1.3-2	Search Window Options	1-23
Table 2.2-1	Event Classifications in System Log Window	2-7
Table 3.1-1	Message Summary Data	3-7
Table 3.1-2	Message Error Summary	3-8
Table 3.1-3	Message Group Information	3-9
Table 3.1-4	GS Message Summary Data	3-9
Table 3.1-5	Translation Toolbox Generated Files	3-15
Table 3.3-1	Email Connection Status	3-24
Table 3.5-1	Summary of X12 Entries in the Queue	3-31
Table 4.1-1	Channel State Indicators	4-4
Table 4.1-2	Communications Interface Types	4-22
Table 4.1-3	Overview of Settings in the Edit Channel Window	4-23
Table 4.1-4	Translation Map Files	4-28
Table 4.1-5	Map Description File Contents	4-29
Table 4.1-6	Example Email Channel Receive From Options	4-48
Table 4.1-7	FTP Channel File Name Variables	4-54
Table 4.2-1	Channel Status Indicators	4-68
Table 7.2-1	DTG Format	7-4
Table 7.2-2	Time Zone Format	7-5
Table A.3-1	CLEO Exit Codes	A-13
Table D.0-1	Message Search Options	D-1

Table E.0-1	File Naming Conventions for Transmitted Data	E-1
Table E.0-2	Optional Parameters for ECDW	E-4
Table H.0-1	Column Order for the Communications Channel Database	H-2
Table H.0-2	Column Order for the Routing Database	H-3
Table H.0-3	Column Order for the Trading Partner Database	H-3
Table H.0-4	Optional Parameters for Importing Data	H-4



## Section 1

# Introduction

---

This guide describes the operating procedures for the Electronic Commerce Processing Node (ECPN), which is a Computer Software Configuration Item (CSCI) of the system identified as Electronic Commerce/Electronic Data Interchange (EC/EDI).

The following subsections provide an introduction to this guide:

- [System Overview \(Section 1.1\)](#)
- [Document Overview \(Section 1.2\)](#)
- [Common Tasks \(Section 1.3\)](#)
- [Documentation Conventions \(Section 1.4\)](#)

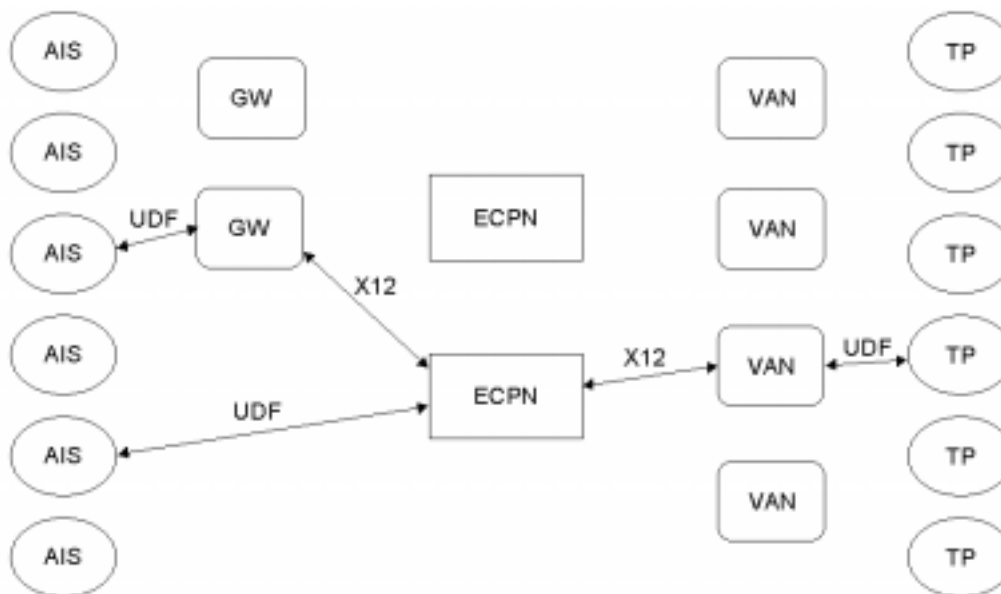
# 1.1 System Overview

The Electronic Commerce Infrastructure (ECI) comprises both government and industry systems that conduct business using Electronic Data Interchange (EDI). ECPN facilitates EDI between government sites (Automated Information Systems [AISs]) and industry sites (trading partners [TPs]).

ECPN processes two categories of messages — X12 format and user defined file (UDF) format. The X12 format complies with the American National Standards Institute (ANSI) benchmark for electronic commerce. As their name implies, UDF formats differ, depending on their origination point. When ECPN receives UDFs, it translates them into X12 format as part of processing. After translation, an X12 may be translated again to another UDF format depending upon its destination.

Figure 1.1-1 depicts a typical message exchange: An AIS sends a UDF message to ECPN, which translates the message to X12. (Some AISs do not send UDFs directly to ECPN. If this is the case, the AIS sends a UDF to a gateway [GW] which translates the message to X12 and then sends it to ECPN.) ECPN forwards the X12 message to a Value Added Network (VAN). The VAN, in turn, translates the message to a UDF format that a trading partner can accept and sends the UDF to the trading partner. If the trading partner sends back a message in response, that message (a UDF) travels to the VAN, which translates it to X12 format and forwards it to ECPN. When ECPN receives the message, it translates the message to UDF and then sends it to the AIS. (For some AISs, ECPN sends the X12 to a GW which translates the message to UDF and then sends it to the AIS.)

Figure 1.1-1 Message Exchange



Message processing — the core of ECPN — can be likened to a journey of sorts. As messages arrive and travel through various paths in the system, they are sent through checkpoints, sorted, assigned tracking numbers, directed to queues, translated, given routing instructions, and sent to new destinations.

A message arrives at ECPN in either a file or an email message that contains one or more messages. This message or message bundle comes into ECPN via a channel from a remote site, also known as a remote host. Each remote site to which ECPN connects is designated as a separate channel. A channel contains information that ECPN needs to connect to the remote site, such as what type of messages (X12 or UDF) it transmits and/or receives, which of the accepted communication interfaces (FTP, email, or modem) the channel employs, and what time and how often the channel connects to the remote site. The period of time in which the channel is connected to the remote site for data transfers is called a *communications session*.

The exact path that a message follows through ECPN depends on the format in which it arrives and the format in which it departs (determined by the channel setup). A message may arrive at ECPN over a channel in one type of message format and depart over a different channel in another message format. For example, a message may arrive as an X12 message but depart as a UDF message. Because of this flexibility, a message can travel four basic paths through ECPN, as shown in [Table 1.1-1](#).

*Table 1.1-1 Possible Message-Processing Paths*

Incoming	Outgoing
X12	X12
X12	UDF
UDF	UDF
UDF	X12

The processing paths for X12 and UDF messages differ significantly. Both the incoming and outgoing X12 and UDF paths are described in this overview.

## X12 message paths

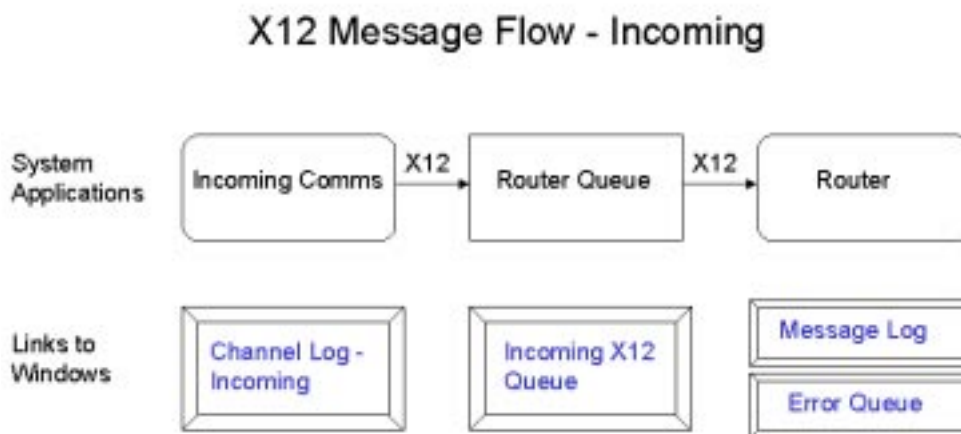
From the time of arrival at ECPN until the time of departure, an X12 message travels through a standard series of checkpoints, queues, and processes. This section describes the processing that occurs on the [incoming](#) and [outgoing](#) paths of an X12 message.

Only one event can cause an X12 message to detour from the incoming or outgoing path — the detection of an error. An error can occur at several points in the incoming and outgoing X12 paths. Use the **Error Queue** window ([Figure 3.2-1](#)) to view all of the errored messages in the system and pinpoint where the error occurred in the processing path. You can then reroute an errored X12 message (as described in [Section 3.2](#)).

### Incoming message path

The incoming X12 message processing path ([Figure 1.1-2](#)) contains three main checkpoints through which incoming messages pass.

*Figure 1.1-2 Processing Path of an Incoming X12 Message*



#### *Arriving at Incoming Communications*

An X12 message arrives at ECPN in a file that may contain one or more messages. When a file arrives over a channel, ECPN places the file in the incoming channel log. You can view the file exactly as it arrived at ECPN using the **In Channel Log Viewer** ([Figure 4.1-6](#)). Files are stored in `Daily/<yyyymmdd>/ChannelLogs/<channel>/indata`.

#### *Waiting in the Router Queue*

After traveling through the incoming communications checkpoint, a file goes to the router queue to await processing by the router. The router is responsible for processing an incoming message and routing it to its destination. You can view all of the files in this queue using the **Incoming X12 Queue** window ([Figure 3.5-1](#)). Files are stored in `Daily/<yyyymmdd>/ChannelLogs/<channel>/indata`.

### *Processing by the Router*

The router retrieves a file from the router queue and processes it as follows:

- Extracts each individual message (ISA through IEA) from the file and assigns a message sequence number (MSN) to it. The MSN uniquely identifies each message in ECPN and provides a tracking number to trace a message through all phases of processing. An MSN has the format SNNNNNNNN/YYYYMMDD, explained in [Table 1.1-2](#).

*Table 1.1-2 MSN Format*

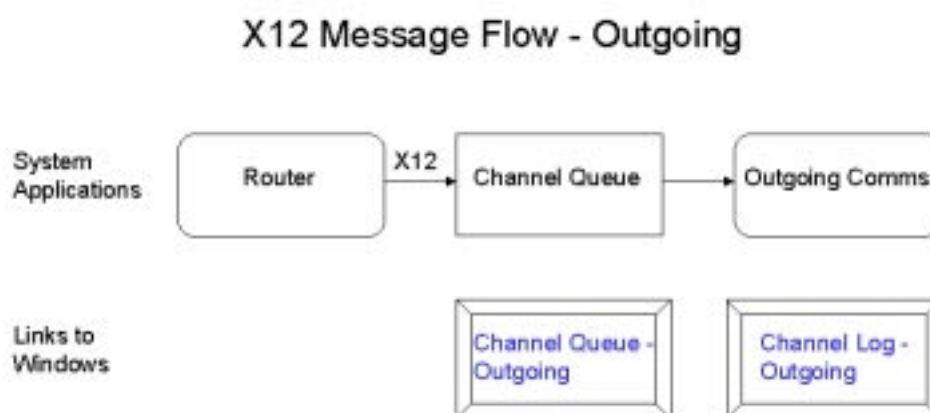
Variable	Explanation	Example
S	1-letter Site ID. This value is defined in the <b>System Setup</b> window (described in <a href="#">Section 2.1</a> ).	C (for DMC-Columbus)
NNNNNNNN	8-digit sequential number; restarts at 00000001 each day.	00000455
YYYY	Year	1998
MM	Month	03
DD	Day	09

- Performs validation checking to ensure that each message complies with the ANSI X12 message standard.
- Determines the channel to which a message should be routed for transmission (as discussed in [Section 5.1](#)).
- Places each message in the message log. The **Message Log** window ([Figure 3.1-1](#)) enables you to view the message log for a certain day and view a Journal Data Summary (JDS) that contains a formatted version of the message as well as important information related to the message. Messages and their associated data (collectively termed *message objects*) are stored in `Daily/<yyyymmdd>/Archives/msg_objs`. If the router detects an error, it also places the message in the error queue. The **Error Queue** window ([Figure 3.2-1](#)) enables you to view all of the errored messages in the system.

## Outgoing message path

The outgoing X12 message processing path ([Figure 1.1-3](#)) contains two main checkpoints through which outgoing messages pass.

*Figure 1.1-3 Processing Path of an Outgoing X12 Message*



### *Waiting in the Channel Queue*

After the router has processed an X12 message, the message travels to one of the outgoing queues to wait for its departure from ECPN over the channel specified by the router. For email channels, you can view all outgoing messages grouped by domain in the **Outgoing Email Queues** window ([Figure 3.3-1](#)). For non-email channels, you can view all of the messages for a particular channel in the **Out Channel Queue Viewer** window ([Figure 4.1-12](#)).

### *Departing Outgoing Communications*

When the channel to which a message is queued initiates communications with its remote host, the channel extracts any messages awaiting transmission from its outgoing queue. The message file is sent out via the channel, and a copy of the transmitted file is placed in the outgoing channel log. You can view an exact copy of the transmitted file using the **Out Channel Log Viewer** ([Figure 4.1-10](#)). Files are stored in `Daily/<yyyymmdd>/ChannelLogs/<channel>/outdata`. The outgoing communications process also updates the status of the message in the **JDS Viewer** ([Figure 3.1-4](#)).

## UDF message paths

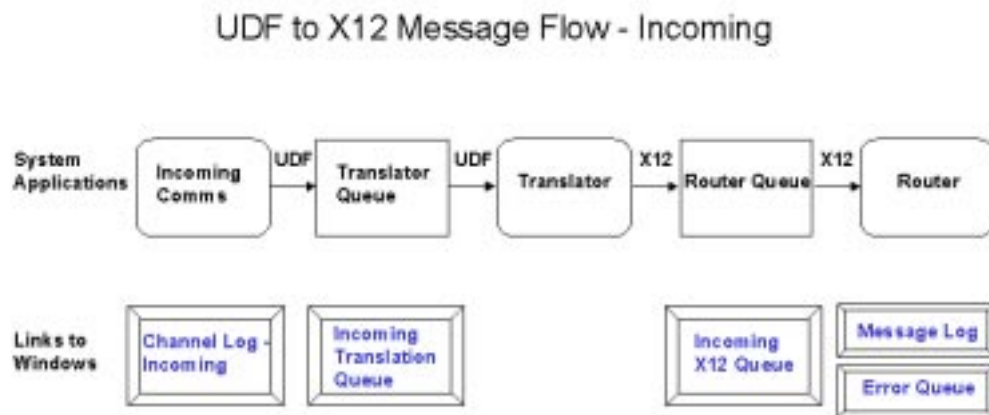
A UDF message travels through more checkpoints in ECPN than an X12 message. This additional processing is primarily due to the translation of data back and forth between UDF and the standard X12 format. ECPN must convert a UDF message to X12 format in order for the router to process it. This section describes the processing that occurs on the [incoming](#) and [outgoing](#) paths of a UDF message.

Like X12 messages, UDFs can detour from the incoming or outgoing path if an error is detected. An error can occur at several points in the incoming and outgoing UDF processing paths. Use the **Error Queue** window ([Figure 3.2-1](#)) to view all of the errored messages in the system and determine where the error occurred in the path. For information on processing errored UDF messages, see [Section 3.2](#).

### Incoming message path

The incoming UDF message processing path ([Figure 1.1-4](#)) contains five main checkpoints through which incoming messages pass.

*Figure 1.1-4 Processing Path of an Incoming UDF Message*



### Arriving at Incoming Communications

A UDF arriving at ECPN may contain one or more message transactions. When a UDF arrives over a channel, ECPN places it in the incoming channel log. You can view the UDF exactly as it arrived at ECPN using the **In Channel Log Viewer** ([Figure 4.1-6](#)). Files are stored in `Daily/<yyyymmdd>/ChannelLogs/<channel>/indata`.

### *Waiting in the Translation Queue*

After a UDF goes through incoming communications, it travels to the translation queue to await processing by the translator. You can view all of the files in this queue with the Incoming Translation Queue window (Figure 3.6-1). Files are stored in `Daily/<yyyymmdd>/ChannelLogs/<channel>/indata`.

### *Processing by the Translator*

The translator extracts a UDF from the translation queue for processing. If a UDF contains one or more message transactions, the translator separates the transactions and converts each transaction to an X12 message, using information stored in the system setup database (described in Section 2.1), trading partner database (described in Section 5.2), map description files (which contain pointers to the specific map files required for translation), and translation map files (described in Section 4.1.2).

If the channel is configured to transmit acknowledgement messages (as described in Section 4.1.3), the translator also generates an 824 acknowledgement message. This message can be sent either to the remote site that transmitted the UDF or to designated email recipients to inform them of the success or failure of the translation. The 824 acknowledgement message is sent in UDF format.

### *Waiting in the Router Queue*

Each resulting X12 file goes to the router queue to await processing by the router. You can view all of the files in this queue with the Incoming X12 Queue window (Figure 3.5-1). Files are stored in `Daily/<yyyymmdd>/ChannelLogs/<channel>/indata`.

### *Processing by the Router*

The router retrieves a file from the router queue and processes it as follows:

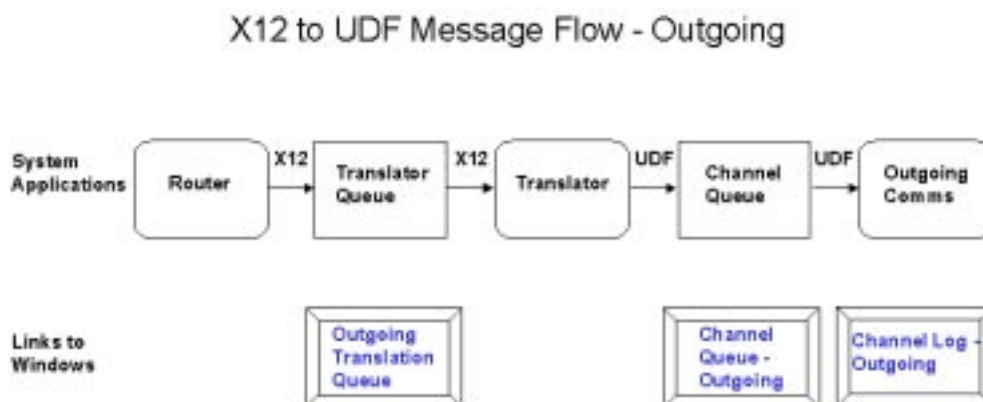
- Assigns a message sequence number to each message. An MSN has the format SNNNNNNNN/YYYYMMDD (explained in Table 1.1-2).
- Performs validation checking to ensure the message complies with the ANSI X12 message standard.
- Determines which channel a message should be routed to for transmission (as discussed in Section 5.1).
- Places each message in the message log. The Message Log window (Figure 3.1-1) enables you to view the message log for a certain day and view a Journal Data Summary (JDS) that contains a formatted version of the message as well as important information related to the message. Messages and their associated data (collectively termed *message objects*) are stored in `Daily/<yyyymmdd>/Archives/msg_objs`. If the router detects an error, it also places the message in the error queue. The Error Queue window (Figure 3.2-1) enables you to view all of the errored messages in the system.



## Outgoing message path

The outgoing UDF message processing path ([Figure 1.1-5](#)) contains four main checkpoints through which outgoing messages pass.

*Figure 1.1-5 Processing Path of an Outgoing UDF Message*



### *Waiting in the Translator Queue*

If an X12 message is set to go out via a UDF channel, it travels to the translation queue to await processing by the translator. You can view all of the messages in this queue in the **Outgoing Translation Queue** window ([Figure 3.7-1](#)).

### *Processing by the Translator*

The translator extracts an X12 message from the translation queue and converts it to a UDF using information stored in the trading partner database (described in [Section 5.2](#)), the system setup database (described in [Section 2.1](#)), map description files (which contain pointers to the specific map files required for translation), and translation map files (described in [Section 4.1.2](#)).

If the message came into ECPN as an X12 and if the originating channel is configured to transmit acknowledgement messages (as described in [Section 4.1.3](#)), the translator generates a 997 acknowledgement in X12 format. This message can be sent either to the originating site that transmitted the X12 or to designated email recipients to inform them of the success or failure of the translation. Each 997 acknowledgement message is placed in the incoming X12 queue to await routing.

### *Waiting in the Channel Queue*

After the translator has processed a message, the message travels to one of the outgoing channel queues to wait for its departure from ECPN over the channel specified by the router. For email channels, you can view the outgoing messages grouped by domain in the **Outgoing Email Queues** window ([Figure 3.3-1](#)). For non-email channels, you can view all of the messages for a particular channel in the **Out Channel Queue Viewer** window ([Figure 4.1-12](#)).

### *Departing Outgoing Communications*

When the channel to which a message is queued initiates communications with its remote host, the channel extracts any messages awaiting transmission from its outgoing queue. The message file is sent out over the channel, and a copy of the transmitted file is placed in the outgoing channel log. You can see an exact copy of the file through the **Out Channel Log Viewer** ([Figure 4.1-10](#)). Files are stored in `Daily/<yyyymmdd>/ChannelLogs/<channel>/outdata`. The outgoing communications process also updates the status of the message in the JDS Viewer ([Figure 3.1-4](#)).

## 1.2 Document Overview

This user's guide assumes that you have a basic knowledge of the ANSI X12 message format and that you are familiar with basic X12 elements such as ISA, IEA, GS, and GE. For a complete description of the ANSI X12 message format, see the *Electronic Data Interchange Draft Version 4 Release 1 X12 Standards*.

This user's guide is organized into sections describing the menus on the main menu bar (Figure 1.3-1) of the ECPN system. The menus that appear on the main menu bar vary according to the role assigned to your login. This guide discusses the menus and options available when the **ECPN Default** role is selected. For instructions on changing roles, see [Section 1.3](#). For information regarding the menus and options available for the other roles, see the *Security Manager's Guide for Electronic Commerce Processing Node* and the *System Administrator's Guide for Electronic Commerce Processing Node*.

Each of the menus available from the ECPN main menu bar is discussed in a section of this guide, as follows:

### System

Describes the **System** menu options, which enable you to set up system information, view the system log, and archive or restore data files. You may also close all open ECPN windows and exit the ECPN system. ([Section 2](#))

### Messages

Describes the **Messages** menu options, which enable you to view queues of incoming and outgoing files and messages awaiting processing and to view the message log and error queue. ([Section 3](#))

### Communications

Describes the **Communications** menu options, which enable you to establish and monitor incoming communications channels. ([Section 4](#))

### Databases

Describes the **Databases** menu options, which enable you to configure the routing database and trading partner database, as well as search the message database. ([Section 5](#))

### Alerts

Describes the **Alerts** menu options, which enable you to monitor and act upon system-generated alerts and to configure the actions performed by ECPN when alerts occur. ([Section 6](#))

### Misc

Describes the **Misc** menu option, which enables you to view the process logs for a specific day. ([Section 7](#))

**Help**

Describes the **Help** menu options, which enable you to view the ECPN Homepage and the online documentation for ECPN. ([Section 8](#))

This guide includes the following information as appendices:

**Dial-up Communications**

Describes the default Kermit®, ZMODEM, and CLEO® script files and how they are configured. ([Appendix A](#))

**Alerts**

Describes each ECPN alert statement that may appear, including the condition(s) that can cause the alert and the user action(s) that can resolve it. ([Appendix B](#))

**Viewing Pre-2.0 Message Archives**

Describes how to view message logs and Oracle® message data that were archived prior to ECPN Version 2.0.0.0. ([Appendix C](#))

**Searching Messages**

Describes the ShowTrueMsg utility, which enables you to display the contents of a message as it came into the system and use the UNIX® system's grep command to search for specific data in the message. ([Appendix D](#))

**Sending Information to the Data Warehouse**

Describes the electronic commerce data warehouse (ECDW) program, which sends a set of specific data each day to the data warehouse. ([Appendix E](#))

**Sample Traffic Report**

Provides a sample traffic report. ([Appendix F](#))

**Routing Documents to the EDA Server**

Provides instructions for setting up ECPN to deliver Standard Procurement System (SPS) documents to the Electronic Document Access (EDA) web server. ([Appendix G](#))

**Importing Data from Spreadsheets**

Describes how to import data from a spreadsheet into the communications channel database, the routing database, or the trading partner database. ([Appendix H](#))

**Viewing COOP Data**

Provides instructions for using the coop\_archive and coop\_extract scripts to archive and and restore message data for viewing on a local system after a Continuity of Operations (COOP). ([Appendix I](#))

## 1.3 Common Tasks

This section covers the basics of using ECPN and introduces fundamental terms and concepts that the rest of this guide builds upon. If you are a new user, you may want to take a few minutes to become familiar with some of the common tasks you will be performing each day.

### Working with Menus

- Navigating the [main menu bar](#)
- Opening a [pull-down menu](#)
- Opening a [pop-up menu](#)
- Using [access keys](#)
- Using [shortcut keys](#)

### Working with Windows

- [Opening](#) a window
- [Closing](#) a window
- [Selecting](#) a tab
- [Refreshing](#) a window
- [Resizing](#) a window box within a window
- [Rearranging](#) columns

### Working with Data

- [Selecting](#) all entries in a list
- [Unselecting](#) all entries in a list
- [Selecting an entry](#) for editing
- [Selecting](#) an item from a drop-down list box
- [Sorting](#) columns of data
- [Searching](#) for data
- [Replacing data](#) in a text box
- [Archiving](#) the contents of a single database window
- Viewing data on a [remote host](#)
- Using [wildcard](#) characters

### Performing Common User Tasks

- Viewing [logs](#) for different dates
- Viewing [online help](#)
- [Changing roles](#)
- Viewing [non-urgent alerts](#)
- [Printing](#) from an ECPN window

## 1.3.1 Working with Menus

This section provides instructions for navigating the main menu bar and opening pull-down menus and pop-up menus. Pull-down menus are available in two places: the main menu bar ([Figure 1.3-1](#)) and a window's menu bar ([Figure 1.3-5](#)). Pop-up menus are opened from within a window ([Figure 1.3-3](#)).

### To navigate the main menu bar

[Figure 1.3-1](#) shows the main menu bar and explains each of its parts. For a description of the options available from the main menu bar, see [Section 1](#).

*Figure 1.3-1 Main Menu Bar*

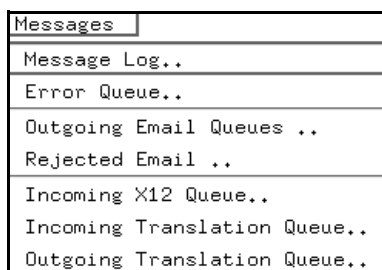


### To open a pull-down menu

The pull-down menu options on the main menu bar can only be accessed as described in this section. The pull-down options on a window's menu bar, however, can be accessed as described in this section and also, in many cases, with shortcut keys (as described in [To use shortcut keys](#)) or from a pop-up menu (as described in [To open a pop-up menu](#)). If an option on a pull-down menu appears dimmed, it is unavailable for selection because either your user role prohibits access to it, or the option is not currently functional.

1. Click the menu title. A pull-down menu appears, as illustrated in [Figure 1.3-2](#).

*Figure 1.3-2 Pull-down Menu*



2. Select an option from the menu.

## To open a pop-up menu

Many windows have a pop-up menu. These menus usually contain the same options offered by a window's menu bar (described in [To open a pull-down menu](#)) and shortcut keys (described in [To use shortcut keys](#)). If an option on a pop-down menu appears dimmed, it is unavailable for selection because one of the following is true: Your user role prohibits access to it; the option is not currently functional; you are logged into a remote host, and the option does not work remotely.

1. Click anywhere in the body of a window with the right mouse button. A pop-up window appears, as illustrated in [Figure 1.3-3](#).

*Figure 1.3-3 Pop-up Window*

Routing Database
HELP ..
ADD
EDIT
DELETE
ARCHIVE
ACTIVATE
DEACTIVATE
PRINT
SELECT ALL
UNSELECT ALL
EXIT

2. Select an option from the menu.

## To use access keys

An *access key* is an underlined letter in a menu name or a menu option. When used with the [Alt] key, an access key invokes the corresponding menu or menu option. Access keys enable you to invoke menus and options using the keyboard instead of the mouse.

1. To open a menu with an access key, press [Alt] + the underlined letter of the menu name. For the example in [Figure 1.3-4](#), you would press [Alt]+[M] to open the **M**essage menu.
2. Once the menu opens, you may invoke a menu option in one of the following ways:
  - a. If the menu option contains an underlined letter, press the underlined letter to invoke the option. For the example in [Figure 1.3-4](#), you would press [X] to invoke the Translation Toolbox option.
  - b. Use the up or down arrow key to scroll to an option, and then press [Enter] to select it.

*Figure 1.3-4 Window Pull-down Menu*

<u>M</u> essage	
Raw Message	Ctrl+V
Formatted Message	Ctrl+J
Reroute	
Retranslate	
Annotate	Ctrl+N
Translation Toolbox	Ctrl+X



## To use shortcut keys

A *shortcut key* is a key that, when used with [Ctrl] or [Alt], invokes a menu option directly from the keyboard. You do not need to display a menu in order to use a shortcut key. You may use shortcut keys to invoke many of the options on a window's pull-down menu. Each shortcut appears listed to the right of the corresponding option name on the menu. Using the example in [Figure 1.3-4](#), you would press [Ctrl]+[N] to invoke the **Annotation Editor** option.

[Table 1.3-1](#) lists the shortcut keys most commonly used in ECPN windows.

*Table 1.3-1 Common Shortcut Keys*

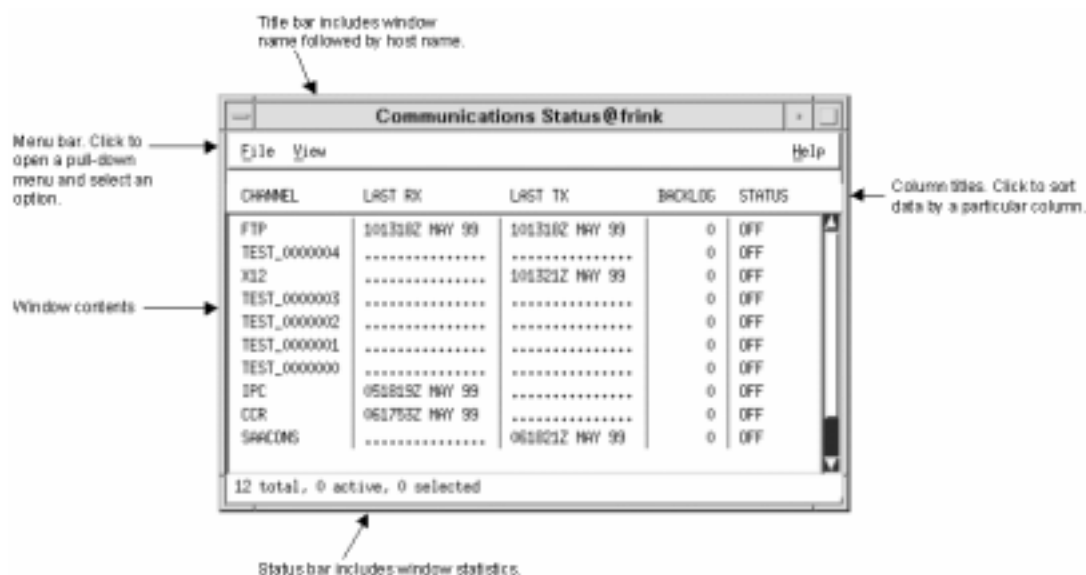
Command	Shortcut keys
Add	[Ctrl]+[A]
Delete	[Ctrl]+[D]
Edit	[Ctrl]+[E]
Exit	[Alt]+[F4]
Help	[Ctrl]+[H]
Print	[Ctrl]+[P]
Refresh	[Ctrl]+[R]
Select All	[Ctrl]+[S]
Unselect All	[Ctrl]+[U]

## 1.3.2 Working with Windows

This section presents the basics of working with ECPN windows. [Figure 1.3-5](#) shows a typical ECPN window. The title bar always displays the name of the window. In addition, if you can connect to a remote ECPN host through the window (as described in [To view data on a remote host](#)), the title bar displays the name of the remote host. If you can use the window to view a log for another date (as described in [To view logs for different dates](#)), the title bar displays the log date.

If a window displays columns of data, as in [Figure 1.3-5](#), the window may also display a status bar at the bottom. The information that appears in this area varies by window; however, it typically includes the total number of entries, the number of active entries, and the number of selected entries.

Figure 1.3-5 Communications Status Window



### To open a window

ECPN windows may be opened in several ways, depending on the window:

- From a pull-down menu (as described in [To open a pull-down menu](#))
- From a pop-up menu (as described in [To open a pop-up menu](#))
- Using an access key (as described in [To use access keys](#))
- Using a shortcut key (as described in [To use shortcut keys](#))

## To close a window

To close an ECPN window, use one of the following methods:

- a. To close ECPN windows that have a menu bar, do one of the following:
  - From the pull-down menu, select **File > Exit**.
  - From the pop-up menu, select **EXIT**.
  - Press **[Alt]+[F4]**.
- b. To close ECPN windows and dialog boxes that do not have a menu bar, use the buttons, which function as follows:

### OK

OK causes the system to act upon the specified data or operation in the window, close the window, and return the focus to the parent window (if applicable).

### CANCEL

If OK also appears in a window, then CANCEL causes the system *not* to act upon the specified data or operation in the window and to close the window. In a window without an OK button, CANCEL simply closes the window. In either case, CANCEL returns the focus to the parent window (if applicable).

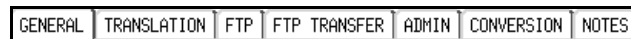
### EXIT

EXIT closes the window and returns the focus to the parent window (if applicable).

## To select a tab

Some windows contain a series of tabs that group similar kinds of settings (Figure 1.3-6). When a window initially opens, the leftmost tab is displayed by default. To display another tab, click it.

Figure 1.3-6 Tabs



## To refresh a window

Some windows display information that is maintained in other applications. For example, the Routing Database window contains channels that are created in the Configure Interface window. To ensure that the most current information is displayed in the Routing Database window, it should be refreshed from time to time.

To refresh a window, select **File > Refresh**.

### **To resize a window box within a window**

Windows that contain more than one list or window box may also contain a sizing knob, which is a small square icon on the right-hand side of the box separator. The sizing knob enables you to adjust the size of each box in proportion to the other. To make a box display more data, click and drag the sizing knob toward the other box. The other box becomes smaller and displays less data.

### **To rearrange columns**

Some windows allow you to change the order in which the columns appear. To do so:

1. Place the mouse pointer over the header of the column you wish to move.
2. Click and hold down the middle mouse button until the menu icon appears.
3. Drag the column heading to the desired column location and release the middle mouse button. When you close the window, the changes you made are cleared; thus, the column headings default to their original order when the window is reopened.

## **1.3.3 Working with Data**

Although the data contained in each of the ECPN windows differs, the techniques for working with the data, such as sorting it or archiving it, are the same, as this section describes.

### **To select all entries in a list**

To select all of the entries in a window's list, do one of the following:

- a. Select **File > Select All**.
- b. Click the first or last entry in a list, hold down the left mouse button, and drag the mouse pointer either downward or upward, selecting the entries.

### **To unselect all entries in a list**

To unselect all of the entries in a window's list, do one of the following:

- a. Select **File > Unselect All**.
- b. Click the first or last entry in a list, hold down the left mouse button, and drag the mouse pointer either downward or upward, unselecting the entries.

## To select an entry for editing

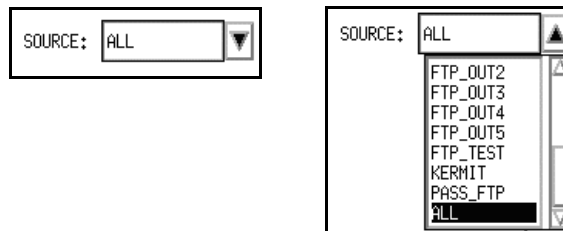
To select an entry for editing, do one of the following:

- a. Double-click the entry.
- b. Click the entry and then select **Edit > Edit**.

## To select an item from a drop-down list box

Several windows contain drop-down list boxes (as illustrated in [Figure 1.3-7](#)) that can be opened and searched for an item.

*Figure 1.3-7 Drop-Down List Box — Closed and Opened*



To select an item from a drop-down list box, do one of the following:

- a. Click the down arrow adjacent to the field containing a drop-down list box. The drop-down list box opens. Using either the scroll bar or the up and down arrow keys on the keyboard, scroll to the desired item, and then select the item. (Note that if you use the arrow keys to select an item, you must press **[Enter]** or **[Esc]** to close the drop-down list box.) The selected item appears in the field.
- b. Place the mouse pointer in the field containing a drop-down list box and use the up and down arrow keys on the keyboard to navigate through the items available for selection. The available items appear one at a time in the field, and the drop-down list box remains closed.

## To sort columns of data

A window may contain one or more columns of data, with a heading at the top of each column. The data in the window is sorted according to a particular column. The data in most windows can be sorted according to any column heading in that window. Note that the type of sort that occurs in a window depends on the nature of the data in the selected column heading. For example, in a column of TORs, the data is sorted in chronological order (from earliest TOR to latest TOR). In a column of names, the data is sorted in alphabetical order. Note that if you re-sort the column of data, the entries are sorted in reverse chronological or alphabetical order.

To sort the entries, click the column heading. The column heading appears highlighted, and the entries in the window appear sorted. Depending on the amount of information contained in the window, a **BUSY** window may appear during the sort process. To cancel the sort, click **Abort** in the **BUSY** window.

## To search for data

Some windows contain a **Search** window to help you locate data quickly.

1. To open the **Search** window:
  - a. From a text editor, select **Search > Find**. The **Search** window appears.
  - b. From a window, place the mouse pointer over the column heading to search, press [Ctrl], and then click the middle mouse button. The **Search** window appears, displaying in its title the name of the column on which you are searching.

*Figure 1.3-8 Search Window*



2. The **Case Sensitive** check box instructs the system whether to consider the capitalization of the data string (in the **Search for** field) for which you are searching. To find an item matching the capitalization of the data string, select the **Case Sensitive** check box; or to ignore the capitalization of the data string when searching, clear the **Case Sensitive** check box.
3. In the **Search for** field, enter the data for which to search. You may make the search as restrictive or nonrestrictive as you like, depending on how much data you enter in this field.

To search columns, you may use any string of characters, whether the string appears at the beginning, middle, or end of the column entry. Suppose, for example, that you are searching for a particular message in the **MSN** column of the **Error Queue** window and know that it arrived at ECPN on July 13, 1998, but do not know its sequence number. (In the **MSN** format, the site ID appears first, followed by the sequence number and the date.) To view all of the errored messages for that day, you would enter 19980713 in the **Search for** field, and then click **Select All**. The system highlights the errored messages for July 13, 1998, so you can look through them for the message you wish to find.

- To customize your search for the data entered in the search window, click one or more of the buttons described in [Table 1.3-2](#).

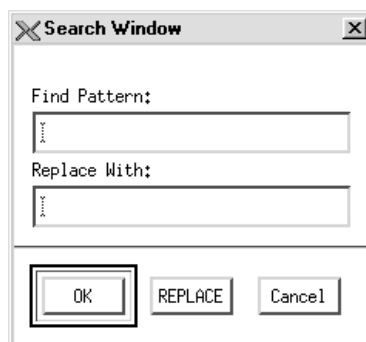
*Table 1.3-2 Search Window Options*

Click	To
Prev	Search backward for data matching the search criteria.
Next	Search forward for data matching the search criteria.
Select All	Select all data matching the search criteria.
Unselect All	Unselect all of the data selected.
Close	Discontinue the search and close the search window.

### To replace data in a text box

- Select **Search > Replace**. The Search window appears.

*Figure 1.3-9 Search Window*



- In the Find Pattern field, enter the data to be replaced.
- In the Replace With field, enter the new data.
- Click Replace.

## To archive the contents of a database window

Select **File > Archive**. The data is saved to the clipboard (a temporary holding area). For details on archiving multiple databases at once and on archiving the data from the clipboard to a more permanent storage device, refer to the *System Administrator's Guide for Electronic Commerce Processing Node*.

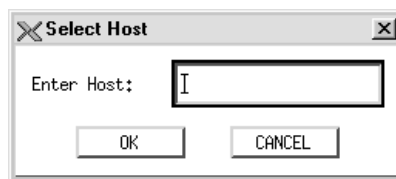
## To view data on a remote host

Some windows enable you to connect to a remote ECPN host across a network and view the data in the remote host's windows. Even though you are viewing data on a remote host, you can use most of the functions of the local window.

In order to connect to a remote host, both the local and remote machines *must* be running the same version of ECPN. In addition, the system administrator *must* add your host name or IP address to the `/h/data/global/EC/System/RPCAuthHosts` file on the remote host.

1. Select **File > Select Host**. The **Select Host** dialog box appears.

Figure 1.3-10 Select Host Dialog Box



2. In the **Enter Host** field, enter the name of the remote ECPN host.

## To use wildcard characters

Certain fields accept the `*` and `?` characters for wildcard use. Wildcards can be used to specify entries for which only a portion of the information is known. They can also be used to specify a group of entries with shared information.

The `*` wildcard is used to replace all characters in a string. For example, in the **ISA/GS FROM** field in the **ADD ROUTING** window, enter `R*` to forward all messages received from sites beginning with the letter **R**. All entries beginning with **R** regardless of character length are considered matches.

The `?` wildcard is used to replace specific characters in a string. For example, in the **ISA/GS FROM** field, enter `? ? S` to forward all messages received from sites with three-character names ending with **S**.



## 1.3.4 Performing Common User Tasks

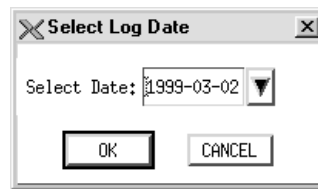
This section contains instructions for performing common user tasks, such as using shortcut keys and viewing online help.

### To view logs for different dates

When you open one of the ECPN logs, such as the message log, the log for the current day is displayed by default. You may view a log for any date that is stored online.

1. Select **File > Select Date**. The **Select Log Date** dialog box appears.

*Figure 1.3-11 Select Log Date Dialog Box*



2. Click the drop-down list box by the **Select Date** field, and then select a date.

### To view online help

Some windows provide access to the online documentation. To access help, select **Help > About**. The appropriate help for the window opens in Netscape®.

### To change roles

The role box, located to the right of the **Help** menu on the main menu bar (Figure 1.3-1), displays the name of the role that is currently in use. If assigned to more than one role, you may use this box to move between roles. To do so: Click the role box and then select the desired role. For additional information on roles, see the *Security Manager's Guide for Electronic Commerce Processing Node*.

### To view non-urgent alerts

On the left top edge of the main menu bar, the **ALERT** box (Figure 1.3-1) provides a listing of non-urgent system alerts. If a non-urgent alert occurs, the box flashes red or yellow. To view and manage these alerts, double-click the **ALERT** box. The **Non-Urgent Alert** window appears. This window, as well as other alert options, are discussed in Section 6.

## To print from an ECPN window

In many windows, a printed report summarizing the information contained in the window can be generated.

1. Select File > Print. The PRINTER window appears.

Figure 1.3-12 PRINTER Window

The PRINTER window is divided into several sections. At the top, it has a title bar 'PRINTER'. Below this, there are two main boxes: 'SELECTED PRINTER' and 'DEFAULT PRINTER'. Each box contains fields for PRINTER, NAME, HOST, STATUS, and COPIES. Below these boxes is a table listing available printers with columns for PRINTER NAME, HOST, and REMARKS. At the bottom are 'OK' and 'CANCEL' buttons.

SELECTED PRINTER		DEFAULT PRINTER	
PRINTER:	HP PAINTJET 3630A	PRINTER:	HP PAINTJET 3630A
NAME:	COP0_LPmo	NAME:	COP0_LPmo
HOST:	moe	HOST:	moe
STATUS:		STATUS:	
COPIES:	001	COPIES:	001

PRINTER NAME	HOST	REMARKS
HP PAINTJET 3630A	MOE	
ALPS P2000	MOE	
CANON BUBBLEJET BJC-820	MOE	

The **SELECTED PRINTER** box displays information about the printer that is currently selected (either the default printer or a printer selected by the user as described in the remainder of this section). The **DEFAULT PRINTER** box displays information about the default printer. (For information on setting the default printer, see the *System Administrator's Guide for Electronic Commerce Processing Node*.) The **SELECTED PRINTER** and **DEFAULT PRINTER** boxes contain the following fields. Note that with the exception of the **COPIES** field in the **SELECTED PRINTER** box, the information in the **SELECTED PRINTER** and **DEFAULT PRINTER** boxes cannot be edited.

### PRINTER

Type of printer.

### NAME

Name of printer.

### HOST

Name of workstation to which printer is connected.

### STATUS

Status of printer.

**COPIES**

Number of copies to be printed.

The scroll list displays an entry for each configured printer available to the workstation. Information for each printer is shown under the following column headings:

**PRINTER NAME**

Type of printer.

**HOST**

Name of workstation to which printer is connected.

**REMARKS**

Any comments regarding the printer.

2. In the **PRINTER** window, select a printer.
  - a. To use the default printer (described in the **DEFAULT PRINTER** box), no action is required.
  - b. To select a different printer, select the printer's entry in the scroll list.

If a printer is selected in the scroll list, the **SELECTED PRINTER** box displays the information for that printer. Otherwise, the **SELECTED PRINTER** box displays the information for the default printer.

3. In the **COPIES** field in the **SELECTED PRINTER** box, enter the desired number of copies.
4. Click **OK**. The report is sent to the selected printer.

## 1.4 Documentation Conventions

The following text styles and formats are used throughout this manual to enhance readability:

- Greater than symbols (>) designate the order in which you select options from a menu bar. For example:

Select **Databases > Routing DB**. The Routing Database window appears.

Select **Message > Translation Toolbox**. The TRANSLATION TOOLBOX window appears.

- Text that you should enter at a command prompt or that appears on the screen as computer output is offset in `Courier` font. Examples are:

To view the contents of the correlation database in the xterm window (standard output), enter `CorrDB_text`.

Replace <number> with the modem number of the remote site.

- Helvetica font is used to distinguish menu options, windows, buttons, and other text that appears on the screen (except for output that appears as a result of entering a command). Display text is spelled and punctuated exactly as it appears on the screen. Examples are:

In the Communications Manager, select a channel and then select **View > Channel Log - Incoming**. The In Channel Log Viewer appears.

In the FILE NAME field, enter a name for the outgoing file.

- Field names within a window are displayed in **bold HELVETICA**. A brief description of the field follows immediately below. Examples are:

**ISA CNTRL #**

Interchange control number.

**ISA FROM**

Interchange sender ID.

- Keyboard keys such as **[Enter]** and **[Tab]** are used within brackets and appear in Helvetica font.
- *Italicized letters* are used for emphasis.

- All commands should be entered as they appear, with the following exceptions:
  - Within the body of a paragraph, a command may be called out using quotation marks (e.g., use the “ls” command). Unless specified otherwise, do not enter the quotation marks when entering a command.
  - Generic or sample data within a command or screen output is offset in angle brackets (e.g., `setenv DISPLAY <local host>:0.0`). Enter your specific information *without* the angle brackets in the command line.
  - When a command is too long to fit on one line, every attempt will be made to break the line before you should enter a space. Unless noted otherwise, you should enter the command as one line with no space after the line break. Example:

```
Enter: echo "00 23 * * * su - ecpn -c /h/EC/progs/
export_msg_list.sh > /dev/null 2>&1" >> /tmp/cron_root
```

Note that the command should be entered on one line with no returns and that there is no space between `progs/export_msg_list.sh`.

- If a command contains mutually exclusive options, the options are enclosed in brackets and separated by a vertical bar. For example:

```
dial [\m(local-prefix) | \m(long-dist-prefix)]
```

You should enter only one of the options *without* the brackets or vertical bar.

- Dates that you must enter or that appear on screen use the format YYYY-MM-DD, where:

Abbreviation	Explanation	Example
YYYY	Year	1999
MM	Month	01
DD	Day	26

- Notes, cautions, and other critical information are contained in text boxes. For example:

**NOTE:** Each ALERT statement that appears within the Action Summary indicates only that ECPN has *generated* an alert in response to a certain alert condition. This statement does not indicate that an alert was *sent* to one or more users. To ensure that the appropriate users are notified of an alert condition, you must add an entry to the alert notification database (as described in [Section 6.3](#)).

- Sections of this guide that have changed since its last release are denoted by a vertical bar in the outer edge of a page, adjacent to the modified text, such as shown here.

- Page numbering reflects the number of each page within a major section. For example, page 3-19 is the 19th page of Section 3.0. Figure numbering is also sequential; thus Figure 3.1-4 is the fourth figure in Section 3.1.
- Figures are designed to resemble on-screen graphics as closely as possible. Figure dimensions do not necessarily match the dimensions of actual menus and windows. All figures depicting windows contain *sample* data and should be used for reference purposes only.

## Section 2

# System

---

The options on the **System** menu enable you to set up system information, view the system log, and archive or restore datafiles. You may also close all open ECPN windows and exit the ECPN system.

The **System** menu provides the following options:

### **System Setup**

To set up translation and site-specific information. ([Section 2.1](#))

### **System Log**

To view a historical record of user modifications to ECPN databases. ([Section 2.2](#))

### **Archive/Restore**

To archive or restore selected ECPN datafiles. ([Section 2.3](#))

### **Close All**

To close all open ECPN windows. ([Section 2.4](#))

### **Exit**

To exit the ECPN system. ([Section 2.5](#))

## 2.1 System Setup

---

**NOTE:** After the ECPN software is installed, you *must* verify that the correct information appears in the System Setup window *before* running ECPN.

---

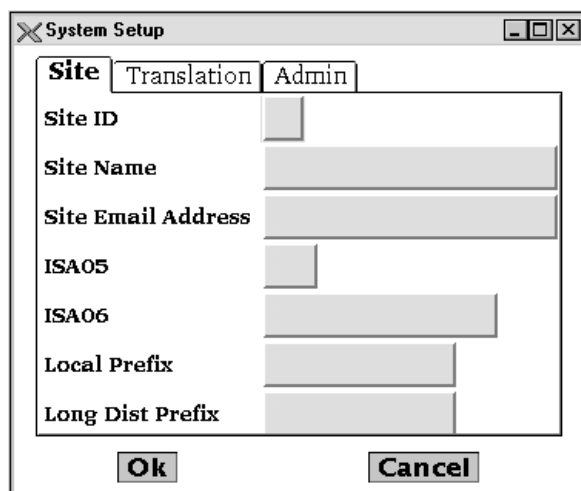
In the System Setup window, you specify information that various ECPN processes (such as the translator and dial-up communications) must access during message processing. Using the System Setup option, you can do the following:

- Specify [site](#) information
- Specify [translation](#) information
- Set [parameters](#) for matching incoming 997s with source messages

### To specify site information

1. Select System > System Setup. The System Setup window appears with the Site tab displayed.

*Figure 2.1-1 System Setup Window: Site Tab*

The image shows a screenshot of the 'System Setup' window with the 'Site' tab selected. The window has a title bar with 'System Setup' and standard window controls. Below the title bar are three tabs: 'Site', 'Translation', and 'Admin'. The 'Site' tab is active. It contains several labeled text input fields: 'Site ID' (a small single-character field), 'Site Name' (a long field), 'Site Email Address' (a long field), 'ISA05' (a small field), 'ISA06' (a medium-length field), 'Local Prefix' (a medium-length field), and 'Long Dist Prefix' (a medium-length field). At the bottom of the window are 'Ok' and 'Cancel' buttons.

2. In the Site ID field, enter your site's 1-letter identifier (e.g., C).

The Site ID appears as the first character of the message sequence number (MSN) that is assigned by the router (described in [Section 1.1](#)).



3. In the **Site Name** field, enter your site's name (e.g., DMCOGDEN).

Each message report and 824 or 997 acknowledgement generated by ECPN includes the **Site Name** entry as the sender's address (From address). The address appears in the following format: <site name> ECPN. If the **Site Name** field does not contain an entry, ECPN is used as the sender's address.

4. In the **Site Email Address** field, enter the email address to appear in the Reply To field in the header of all messages sent from your site (e.g., ecpn@disa.mil). This email address also appears in the From field of all alert notifications sent by email.

The email address you enter does not need to be specific to your ECPN site. It can be an email alias set up by your system administrator that includes multiple ECPN sites (e.g., DMC-Ogden and DMC-Columbus). The benefit of entering an inclusive alias is to ensure that no messages sent to this address are lost during a Continuity of Operations (COOP). Although one ECPN site will not receive messages during a COOP, the other site will receive messages if the alias includes both sites.

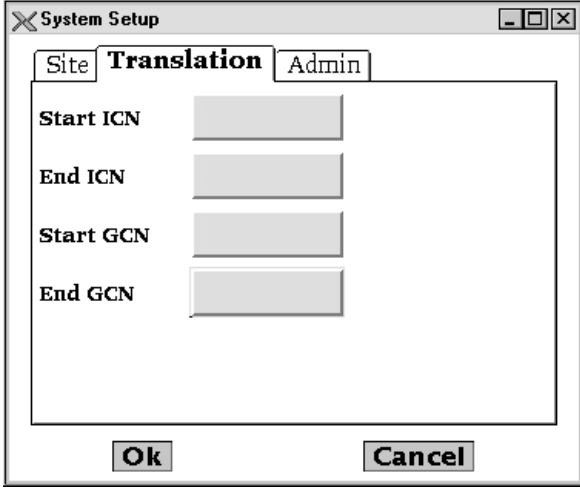
5. In the **ISA05** field, enter your site's sender qualifier (e.g., ZZ). The translator places this entry in the ISA05 field of each X12 it generates.
6. In the **ISA06** field, enter your site's sender ID (e.g., DMCCOLUMBUS). The translator places this entry in the ISA06 field of each X12 it generates.
7. (Optional) In the **Local Prefix** field, enter the prefix necessary to dial any local phone number from your site (e.g., 9). In order for ECPN to use this value, you must verify that the Kermit and ZMODEM scripts include the `local-prefix` macro (as described in Appendix A.1 and A.2) and that the CLEO dial-up scripts have been edited to include the appropriate prefix (as described in Appendix A.3).
8. (Optional) In the **Long Dist Prefix** field, enter the prefix or access code necessary to dial a long-distance phone number from your site (e.g., 1). In order for ECPN to use this value, you must verify that the Kermit and ZMODEM scripts include the `long-dist-prefix` macro (as described in Appendix A.1 and A.2) and that the CLEO dial-up scripts have been edited to include the appropriate prefix (as described in Appendix A.3).

## To specify translation information

Control numbers are essential for translating user defined files (UDFs) into X12 format. Each ECPN site is assigned a range of ISA and GS control numbers that *must* be entered in the **System Setup** window. When your site receives a UDF, ECPN translates the UDF to an X12 file. Because UDFs do not have control numbers, ECPN assigns them during translation using the range of numbers you specify in the **System Setup** window. Once all of the control numbers for your site have been assigned, the system defaults back to the first number in the range.

1. In the **System Setup** window, select the **Translation** tab.

*Figure 2.1-2 System Setup Window: Translation Tab*



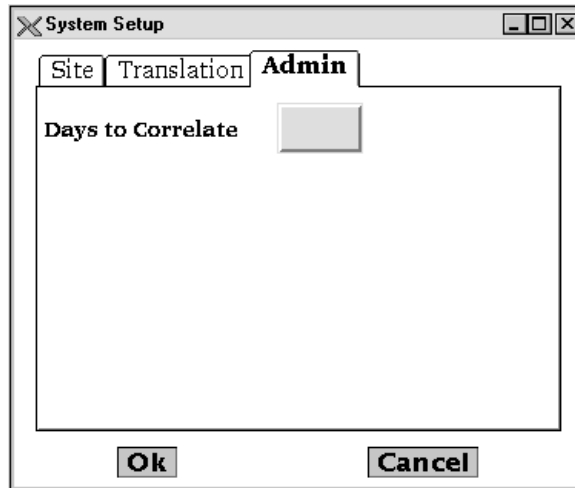
The screenshot shows a window titled "System Setup" with three tabs: "Site", "Translation", and "Admin". The "Translation" tab is selected. Inside the window, there are four text input fields labeled "Start ICN", "End ICN", "Start GCN", and "End GCN". At the bottom of the window are two buttons: "Ok" and "Cancel".

2. In the **Start ICN** field, enter the starting ISA Control Number (ICN), which is the first number in the range of ISA numbers assigned to your ECPN site.
3. In the **End ICN** field, enter the ending ICN, which is the last number in the range of ISA numbers assigned to your ECPN site.
4. In the **Start GCN** field, enter the starting GS Control Number (GCN), which is the first number in the range of GS numbers assigned to your ECPN site.
5. In the **End GCN** field, enter the ending GCN, which is the last number in the range of GS numbers assigned to your ECPN site.

## To set parameters for matching incoming 997s with source messages

1. In the System Setup window, select the Admin tab.

Figure 2.1-3 System Setup Window: Admin Tab



2. In the Days to Correlate field, specify how many days of messages you want the system to search in order to match an incoming 997 with its source message that ECPN transmitted.

For instance, suppose that you enter 7 in this field. When ECPN receives a 997 functional acknowledgement from a VAN, it searches through all of the X12 messages transmitted for the past 7 days to locate the message that the 997 is acknowledging. If a match is made between a 997 and its source message, the Linkages portion of the JDS Viewer is updated for both messages to indicate the link between them (as described in [Section 3.1](#)). If a match is not made, the 997 is placed in the error queue (as explained in [Section 3.2](#)) and tagged with this error: *997 Unable to Correlate*.

3. Click **Ok** to save changes.

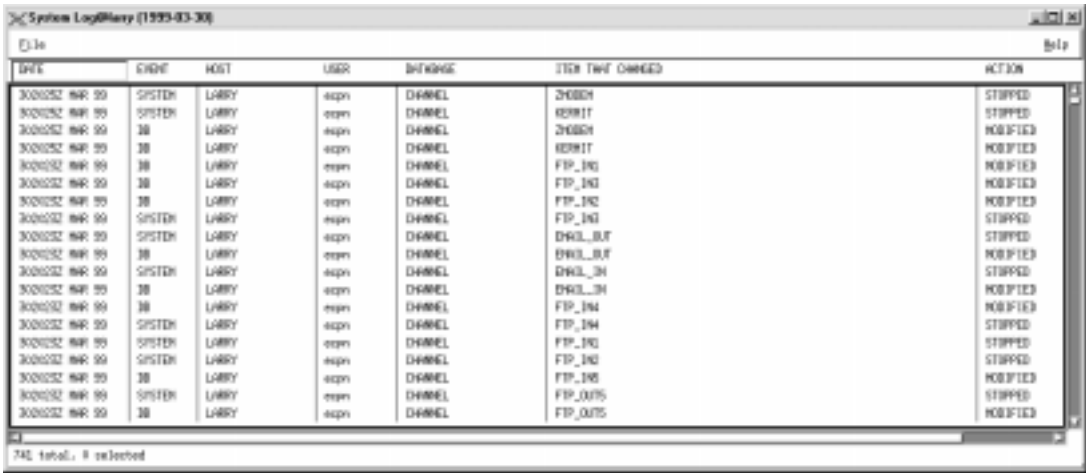
## 2.2 System Log

The system log provides a chronological record of user modifications to ECPN databases. You can use the system log as a troubleshooting tool for determining whether a system anomaly is related to a database modification. For example, suppose one of the FTP channels in the communications channel database is listed as stopped, but you know that you did not manually stop the channel. You can check the system log to determine if another user stopped the channel, when the change occurred, and from what machine the change was made. Note that the system log only tracks *user* modifications to the ECPN databases; therefore, not all system anomalies can be traced using this option.

### To view the system log

Select System > System Log. The System Log window appears.

Figure 2.2-1 System Log Window



The screenshot shows a window titled "System Log@Harry (1993-03-30)". It contains a table with the following columns: DATE, CTYPE, HOST, USER, IN/NAME, ITEM TYPE CHANGED, and ACTION. The table lists various system events, including channel modifications and stops. At the bottom, it says "742 total, 8 selected".

DATE	CTYPE	HOST	USER	IN/NAME	ITEM TYPE CHANGED	ACTION
300605Z MAR 99	SYSTEM	LARRY	ecpn	CHANNEL	ZHOSCH	STOPPED
300605Z MAR 99	SYSTEM	LARRY	ecpn	CHANNEL	ZHOSCH	STOPPED
300605Z MAR 99	30	LARRY	ecpn	CHANNEL	ZHOSCH	MODIFIED
300605Z MAR 99	30	LARRY	ecpn	CHANNEL	ZHOSCH	MODIFIED
300605Z MAR 99	30	LARRY	ecpn	CHANNEL	FTP_IN3	MODIFIED
300605Z MAR 99	30	LARRY	ecpn	CHANNEL	FTP_IN3	MODIFIED
300605Z MAR 99	30	LARRY	ecpn	CHANNEL	FTP_IN3	MODIFIED
300605Z MAR 99	SYSTEM	LARRY	ecpn	CHANNEL	FTP_IN3	STOPPED
300605Z MAR 99	SYSTEM	LARRY	ecpn	CHANNEL	EHOL_BUT	STOPPED
300605Z MAR 99	30	LARRY	ecpn	CHANNEL	EHOL_BUT	MODIFIED
300605Z MAR 99	SYSTEM	LARRY	ecpn	CHANNEL	EHOL_BH	STOPPED
300605Z MAR 99	30	LARRY	ecpn	CHANNEL	EHOL_BH	MODIFIED
300605Z MAR 99	30	LARRY	ecpn	CHANNEL	FTP_IN4	MODIFIED
300605Z MAR 99	SYSTEM	LARRY	ecpn	CHANNEL	FTP_IN4	STOPPED
300605Z MAR 99	SYSTEM	LARRY	ecpn	CHANNEL	FTP_IN3	STOPPED
300605Z MAR 99	SYSTEM	LARRY	ecpn	CHANNEL	FTP_IN3	STOPPED
300605Z MAR 99	30	LARRY	ecpn	CHANNEL	FTP_IN3	MODIFIED
300605Z MAR 99	SYSTEM	LARRY	ecpn	CHANNEL	FTP_OUT5	STOPPED
300605Z MAR 99	30	LARRY	ecpn	CHANNEL	FTP_OUT5	MODIFIED

The System Log window displays an entry under the following column headings for each event in the log:

#### DATE

Date and time when the system logged the event.

**EVENT**

Classification of the type of modification that occurred, from among the following options. (Note that **DB** and **SYSTEM** are the most common events.)

*Table 2.2-1 Event Classifications in System Log Window*

<b>Event</b>	<b>Definition</b>	<b>Example</b>
<b>DB</b>	Direct modification to an ECPN database	<ul style="list-style-type: none"> <li>Changing an entry in the routing database</li> <li>Starting or stopping a communications channel</li> </ul>
<b>HARDWARE</b>	Modification that affects the way ECPN communicates with the hardware	<ul style="list-style-type: none"> <li>A system administration change to the device table</li> </ul>
<b>SYSTEM</b>	A system-wide modification (can parallel a <b>DB</b> event)	<ul style="list-style-type: none"> <li>Modifying the system setup</li> <li>Starting or stopping a communications channel (Log shows two entries for this type of action.)</li> </ul>

**HOST**

Name of the machine from which the modification occurred.

**USER**

Login name of the user who made the modification.

**DATABASE**

Name of the ECPN database affected by the change (e.g., **CHANNEL**, **X12 ROUTE**).

**ITEM THAT CHANGED**

The specific item that was modified. For example, in the case of a communications channel database change, the name of the channel that was changed appears in this column. In the case of a change to the routing database, the routing criteria (e.g., source, destination) appears in this column.

**ACTION**

Brief description of the type of change that occurred (e.g., **APPENDED**, **STARTED**, **STOPPED**, **DELETED**). Note that certain types of modifications, such as starting a channel, are logged twice in the system log, once as a **SYSTEM** event (**MODIFIED**) and again as a **DB** event (**STARTED**).

## 2.3 Archive/Restore

The Archive/Restore option enables you to archive, restore, or delete *daily directories*. (For information on archiving *databases*, see [Section 4.7](#) of the *System Administrator's Guide for Electronic Commerce Processing Node*.) The daily directories consist of the following components:

- channel logs
- message logs
- messages
- archives of the message tables
- message reports
- session/process logs
- system logs

The main purpose of the Archive/Restore option is to provide a means of archiving existing daily directories before a software upgrade and restoring them after the upgrade is complete. Note that the Archive/Restore option enables you to view only those message logs and message tables that were archived *after* ECPN Version 2.0.0.3. For instructions on how to view message logs and message tables that were archived *prior* to ECPN Version 2.0.0.3, see [Appendix C](#).

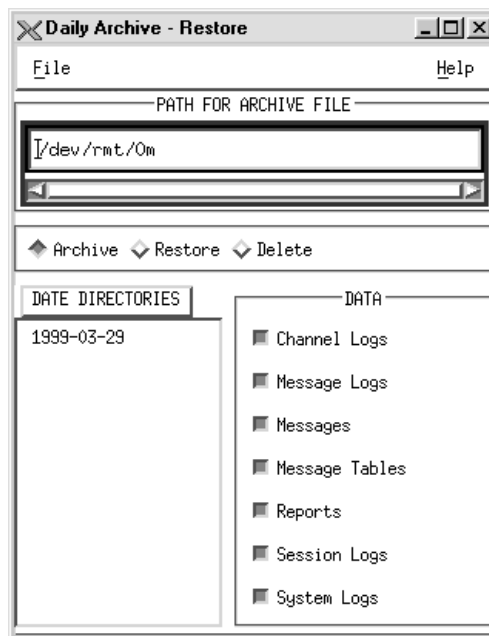
Using the Archive/Restore option, you may do the following:

- [View](#) a list of daily directories that may be archived
- [Archive](#) selected daily directories and data
- [Restore](#) selected daily directories and data
- [Delete](#) selected daily directories

## To view a list of daily directories that may be archived

Select **System > Archive/Restore**. The Daily Archive - Restore window appears.

*Figure 2.3-1 Daily Archive - Restore Window*



The **DATE DIRECTORIES** box, located at the bottom left of the Daily Archive - Restore window, displays all of the dates for which files are available for archiving. The entries appear in YYYY-MM-DD format.

The **DATA** box, located at the bottom right of the Daily Archive - Restore window, enables you to select the types of data you wish to archive or restore. For example, you may choose to restore only the messages and message logs for a specific date. Note that when you open the Daily Archive - Restore window, all data types are selected automatically.

### To archive selected daily directories and data

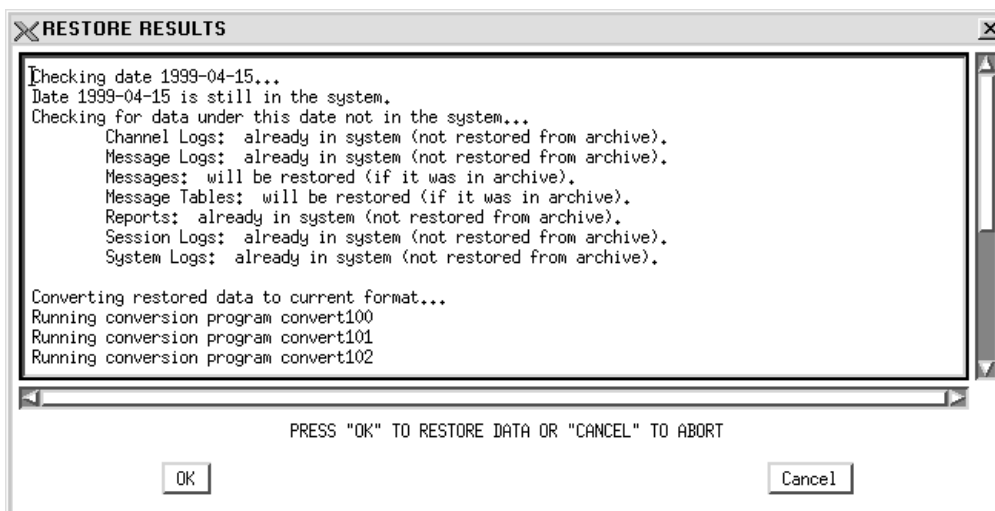
1. In the PATH FOR ARCHIVE FILE field, enter the *absolute* path and file name in which to archive the directories. The path may be on either the system's hard disk or a separate device. (Note that the default entry in this field is /dev/rmt/0m, which is a tape device.)
2. Select Archive.
3. In the DATE DIRECTORIES box, select one or more directories. Note that you cannot archive the directory for the current day from this window because the directory is still in use by the system. To archive the current day's directory, you must use the Archive/Restore option in the system administrator's menu (described in [Section 4.6](#) of the *System Administrator's Guide for Electronic Commerce Processing Node*).
4. In the DATA box, select one or more types of data.
5. Select File > Execute. A warning window appears, asking you to confirm the action.
6. In the warning window, click OK. (Note that if no data is available for a particular data type for each date you selected, a notification window appears, listing the data that will not be archived. To continue, click OK.) The selected directories are written to a tar file and archived to the specified path.

### To restore selected daily directories and data

1. In the PATH FOR ARCHIVE FILE field, enter the *absolute* path and file name from which to restore the daily directories. This path may be on either the system's hard disk or a separate device.
2. Select Restore. The DATE DIRECTORIES box displays a list of dates that are available. Note that if you are restoring daily directories that were archived in an earlier version of ECPN (between Versions 2.0.0.3 and 2.1), you cannot select a *specific* daily directory or data type to restore. A warning window appears, stating that *all* of the daily directories in the archive file will be restored. To continue, click OK in the warning window and proceed to [Step 5](#).
3. In the DATE DIRECTORIES box, select one or more directories.
4. In the DATA box, select one or more types of data.
5. Select File > Execute. A warning window appears, asking you to confirm the action.
6. In the warning window, click OK. The RESTORE RESULTS window appears, displaying information about the data restored, including information about any data that was converted from an older version of ECPN to the current version.



Figure 2.3-2 RESTORE RESULTS Window



7. To restore the selected directories to the specified path, click OK.

### To delete selected daily directories

1. In the DATE DIRECTORIES box, select one or more directories. Note that the directory for the current day cannot be deleted.
2. Select **Delete**. A warning window appears, stating that the directories should be archived prior to deletion. For information on archiving these directories, see *To archive selected daily directories and data*.
3. In the warning window, click OK. The selected directories are deleted from the system.

## 2.4 Close All

Use the Close All option on the **System** menu to close all open ECPN windows. When the windows close, any changes or additions that have *not* been applied are lost.

## 2.5 Exit

Use the **Exit** option on the **System** menu to exit the ECPN system. After exiting the interface, the login screen reappears. Note that using this option does *not* halt background ECPN processes (such as the router or translator).

This page has been intentionally left blank.

## Section 3

# Messages

---

The options on the **Messages** menu enable you to view queues of incoming and outgoing files and messages that are awaiting processing. You may also view the message log and error queue. While viewing a log or queue, you may also do various tasks with the messages contained therein, such as viewing and annotating a message.

The **Messages** menu provides the following options:

### **Message Log**

To view a daily log of messages and do various tasks with the messages. ([Section 3.1](#))

### **Error Queue**

To view messages that contain errors and do various tasks with the messages. ([Section 3.2](#))

### **Outgoing Email Queues**

To view a queue of outgoing email messages and do various tasks with the messages. ([Section 3.3](#))

### **Rejected Email**

To view email messages rejected by ECPN, determine the cause of the errors, and reinject the messages into the message log. ([Section 3.4](#))

### **Incoming X12 Queue**

To view a queue of incoming X12 files and messages awaiting processing by the router. ([Section 3.5](#))

### **Incoming Translation Queue**

To view a queue of incoming user defined files (UDFs) awaiting translation to X12 messages. ([Section 3.6](#))

### **Outgoing Translation Queue**

To view a queue of outgoing X12 messages awaiting translation to UDFs. ([Section 3.7](#))

## 3.1 Message Log

Once the router processes a message, the decoded message is placed in a message log that contains all of the messages for a single day. A new log is created for each day's messages at midnight (ZULU time). The **Message Log** option enables you to view a message log for a specific day. Messages in a message log can be viewed, annotated, retranslated, or rerouted; however, they cannot be deleted from the log.

Using the **Message Log** option, you can do the following:

- View the [message log](#)
- View a [specific range](#) of messages
- View a [raw message](#)
- View the [JDS for a message](#)
- [Reroute](#) one or more errored messages
- [Retranslate](#) one or more errored messages
- [Annotate](#) one or more messages
- [Manually translate](#) a message and [troubleshoot](#) translation errors

### To view the message log

Select **Messages > Message Log**. The **Message Log** window appears.

Figure 3.1-1 Message Log Window

MSG#	IN CHANNEL	ORIGINAL FILE NAME	MSG TOP	MSG TOP	TOA TO	ISM FROM	TOA #	MSG SIZE
40002586/1999130	FIP_B4	7812	001021:132	001021:132	PUBL IC	DMCCOLAPBUS	201800503	318
40002585/1999130	FIP_B4	7607	001021:132	001021:132	PUBL IC	DMCCOLAPBUS	201800499	7620
40002584/1999130	FIP_B4	7902	001021:132	001021:132	PUBL IC	DMCCOLAPBUS	201800483	8754
40002583/1999130	FIP_B4	7407	001021:132	001021:132	PUBL IC	DMCCOLAPBUS	201800389	8479
40002582/1999130	FIP_B4	7492	001021:162	001021:162	PUBL IC	DMCCOLAPBUS	201800295	2718
40002581/1999130	FIP_B4	7407	001021:082	001021:082	PUBL IC	DMCCOLAPBUS	201800286	7263
40002580/1999130	FIP_B4	7492	001021:082	001021:082	PUBL IC	DMCCOLAPBUS	201800185	7352
40002579/1999130	FIP_B4	7811	001021:042	001021:042	PUBL IC	DMCCOLAPBUS	201800522	8354
40002578/1999130	FIP_B4	7906	001021:042	001021:042	PUBL IC	DMCCOLAPBUS	201800487	8396
40002577/1999130	FIP_B4	7904	001021:032	001021:032	PUBL IC	DMCCOLAPBUS	201800482	8474
40002576/1999130	FIP_B4	7496	001021:032	001021:032	PUBL IC	DMCCOLAPBUS	201800387	8650
40002575/1999130	FIP_B4	7491	001021:062	001021:062	PUBL IC	DMCCOLAPBUS	201800292	7395
40002574/1999130	FIP_B4	7496	001021:062	001021:062	PUBL IC	DMCCOLAPBUS	201800287	3427
40002573/1999130	FIP_B4	7491	001021:062	001021:062	PUBL IC	DMCCOLAPBUS	201800182	7529
40002572/1999130	FIP_B4	7475	001021:042	001021:042	PUBL IC	DMCCOLAPBUS	201800276	8476
40002571/1999130	FIP_B4	7479	001021:482	001021:482	PUBL IC	DMCCOLAPBUS	201800271	8650
40002570/1999130	FIP_B4	7810	001021:402	001021:402	PUBL IC	DMCCOLAPBUS	201800421	8480
40002569/1999130	FIP_B4	7906	001021:402	001021:402	PUBL IC	DMCCOLAPBUS	201800406	2718
40002568/1999130	FIP_B4	7900	001021:402	001021:402	PUBL IC	DMCCOLAPBUS	201800381	7263
40002567/1999130	FIP_B4	7496	001021:402	001021:402	PUBL IC	DMCCOLAPBUS	201800386	7262

2586 total, 1296 to 2586 show, 0 selected

The last message processed on the displayed day, which is also the message with the highest message sequence number (MSN) in the log, appears first in the log, while the first message processed on the displayed day appears last in the log and has the lowest MSN. For instructions on how to change the sort order of MSNs in the log, see [Section 1.3](#).

If the message log for any day contains more than 2,000 messages, the scrollable message box displays only the 2,000 messages processed most recently. To view any messages processed earlier, use the **Edit Requested Record** dialog boxes (as described in *To view a specific range of messages*).

This window displays an entry under the following column headings for each message in the log.

**MSN**

Message sequence number assigned to an incoming decoded message in the order of processing by the router. The MSN has the format SNNNNNNNNN/YYYYMMDD, explained in [Table 1.1-2](#).

**IN CHANNEL**

Channel over which the message was received.

**ORIGINAL FILE NAME**

Name of the file containing the message, as originally received by ECPN.

**MSG TOR**

Time of message receipt by the channel.

**MSG TOP**

Time of message processing by the router (when the message is assigned an MSN).

**ISA TO**

Interchange receiver name (from the ISA08 field of the X12 message).

**ISA FROM**

Interchange sender name (from the ISA06 field of the X12 message).

**ISA #**

Interchange control number (from the ISA13 field of the X12 message).

**MSG SIZE**

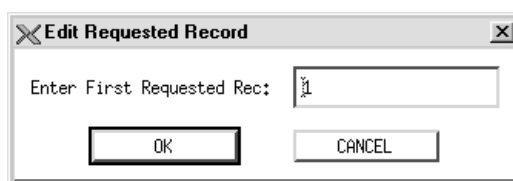
Size of the message in bytes.

## To view a specific range of messages

You may specify the first and last messages to appear in the message log. The first message requested appears at the *bottom* of the range of messages because it was received by ECPN prior to the other messages in the range. The last message requested appears at the *top* of the range of messages because it was received after the other messages in the range. For instructions on how to change the default sort order of MSNs in the log, see [To sort columns of data](#) in [Section 1.3](#).

1. In the Message Log window, select File > Enter First Requested. The Edit Requested Record dialog box appears.

Figure 3.1-2 Edit Requested Record Dialog Box



2. In the Enter First Requested Rec field, enter the MSN of the first message to view in the message log, and then click OK. Entries in this field must be greater than 0. To format the entry, you do not need to enter leading zeroes, and you should enter only the sequential portion of the MSN, *not* the site ID or the date portion.

For example, if the first message that you wish to view is MSN C00000022/19981029, an entry of 22 is valid, whereas an entry of 22/19981029 is invalid.

3. In the Message Log window, select File > Enter Last Requested. The Edit Requested Record dialog box appears (similar to the dialog box in [Figure 3.1-2](#)).
4. In the Enter Last Requested Rec field, enter the MSN of the last message to view in the range of messages, and then click OK. Entries in this field must be greater than or equal to the value in the Enter First Requested Rec field. The format of the entry should be the same as for [Step 2](#).

The Message Log window displays the specified range of messages.



## To view a raw message

In the Message Log window, select the message and then select Message > Raw Message. The Raw Viewer appears, displaying the MSN of the selected message in the title bar.

Figure 3.1-3 Raw Viewer



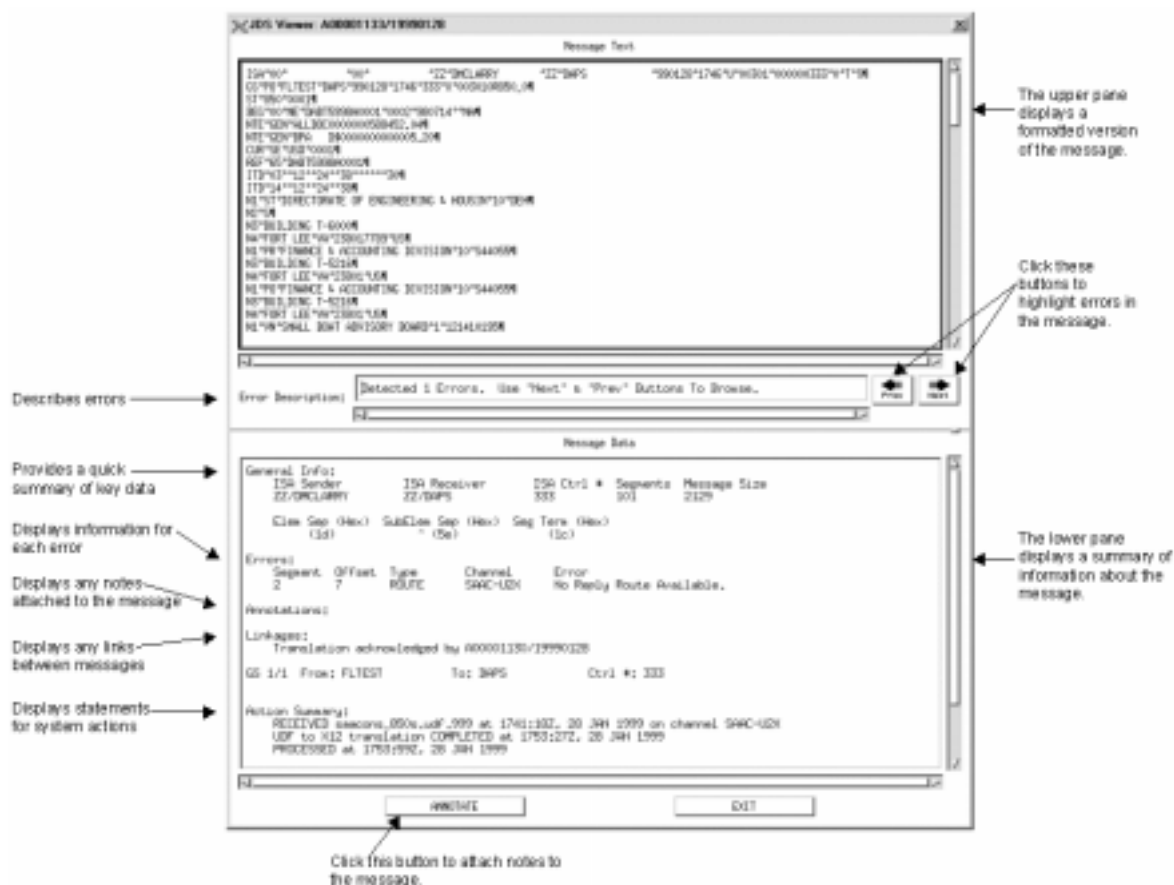
This window displays the raw, unformatted message as it arrived at ECPN. The title bar contains a notation as to whether the message was originally an X12 or a UDF.

In the Raw Viewer, the raw, unformatted message wraps from line to line. Use the scroll bars to navigate through the message. Special characters that are unprintable are represented by hexadecimal values enclosed in angle brackets (e.g., <0d>).

## To view the JDS for a message

The Journal Data Summary (JDS) provides valuable information about a message. To view it: In the Message Log window, double-click the message, or click it once and then select **Messages > Formatted Message**. The JDS Viewer appears, displaying the MSN of the selected message in the title bar.

Figure 3.1-4 JDS Viewer



The JDS Viewer contains two main sections — the **Message Text** box and the **Message Data** box — with the **Error Description** field appearing between the two boxes. The JDS Viewer also contains an **ANNOTATE** button that invokes the Annotation Editor window. For instructions on using this window, see *To view the JDS for a message*.

The **Message Text** box displays the formatted message, with each line of text containing an individual message segment. Use the scroll bars to navigate through the message.

The **Error Description** field displays the number of errors in the message (in the format n/x) and an explanation of each error. To track the errors in a message, use the **Prev** and **Next** buttons adjacent to the **Error Description** field to navigate through the errors. As you click these buttons, the **Error Description** field explains the cause of each error, and the **Message Text** box highlights the part of the message containing the error. Note that all messages with errors also appear in the error queue (described in [Section 3.2](#)).

The **Message Data** box provides a summary of key facts about the message. The box contains entries for some or all of the following fields.

### General Info

Summary of basic message data, including the elements described in [Table 3.1-1](#).

*Table 3.1-1 Message Summary Data*

Field name	Description
ISA Sender	Interchange Sender ID (from the ISA06 field).
ISA Receiver	Interchange Receiver ID (from the ISA08 field).
ISA Ctrl #	Interchange Control Number (from the ISA13 field).
Segments	Number of X12 segments in the message (ISA to IEA inclusive).
Message Size	Size of the message, in bytes.
Elem Sep (Hex)*	Special character (represented by a hexadecimal value) that separates the data elements within a segment. (The first occurrence of the data element separator is at the fourth byte of the interchange control header.)
SubElem Sep (Hex)*	Special character (represented by a hexadecimal value) that separates each data sub-element within a message segment (from the ISA16 field).
Seg Term (Hex)*	Special character (represented by a hexadecimal value) that appears after the last data element in a segment, marking the end of the segment. (The first occurrence of the segment terminator is immediately after the ISA16 data element.)

\* If the value is printable, then the ASCII equivalent is displayed before the hexadecimal value.

**Errors**

Summary of message error(s), including the information described in [Table 3.1-2](#). Note that this information is cleared if the message is rerouted or retranslated.

*Table 3.1-2 Message Error Summary*

Field name	Description
Segment	Segment or line in which the error was detected.
Offset	Column in which the error was detected. (Each digit in a segment or line equals a column.)
Type	Indication of the place in message processing where the error occurred. Possible values are as follows: DECODE, ROUTE, OUT COMMS, IN XLATE, OUT XLATE.
Channel	Channel on which the errored message was received.
Error	Brief description of the error and explanation of its cause.

**Annotations**

Summary of annotations to the message, including the login name of the administrator who made the annotation and the date and time of the annotation, in the following format:

ecpn        151644:20Z MAR  
Research cause of failure, and if necessary, reroute.

**Linkages**

Summary of links between the displayed message and any other message(s). This field indicates links to other messages for 824 acknowledgements, 997 acknowledgements, and retranslated messages.

To determine if a message in the message log is an 824 or 997 acknowledgement, you *must* consult this field. If the message is an acknowledgement, a statement such as the following appears: 824 Ack for C00000085/19980901.

### Message Group Info (IPC messages only)

Summary of data for a message group, as described in [Table 3.1-3](#). This information enables you to track a group of messages as they arrive at ECPN together, journey through the system as individual messages, and depart. The first message in a group is known as the keeper because it serves as the storage area for the list of messages that compose the group.

*Table 3.1-3 Message Group Information*

Field name	Description
Message Group Keeper	MSN of the first message in the group — the keeper.
Total Messages in group	Total number of messages in the group.
Message List	(Appears only in the message keeper) Messages that compose the group, listed by MSN.

### GS

Summary of data for *each* GS in the message, including the fields described in [Table 3.1-4](#).

*Table 3.1-4 GS Message Summary Data*

Field name	Description
#/#	Number of the GS out of the total number of GSs for the message, e.g., 1/2.
From	Application Sender's Code (from the GS02 field).
To	Application Receiver's Code (from the GS03 field).
Ctrl #	Group Control Number (from the GS06 field).

### Action Summary

List of statements summarizing the actions performed on a message since its arrival at ECPN. The format of each statement varies depending on the action being described; however, all statements do include one common element: The first word always states the action. Example actions include: **RECEIVED**, **PROCESSED**, **ROUTED** (for primary routes), **CC ROUTED** (for secondary routes, also known as carbon copy routes).

Following the action, the format of the statement varies to include information specific to the action performed by the system. For example, when ECPN receives a message, the statement for that message has a format similar to the following:

RECEIVED 15417.txt at 1728:33Z, 27 MAR 1998 on channel FTP1.

The Action Summary also includes a chronological record of any errors in the message, as well as any alerts that were generated. For example, if an outgoing message fails UDF→X12 translation, the error and alert statements in the action summary have a format similar to the following:

ERROR at 1732:20Z, 09 SEP 1998 due to: 'UDF→X12 Translation Failed'.  
ERROR at 1732:20Z, 09 SEP 1998 on channel IPC due to: 'Empty Message'.  
ALERT UDF2X12 CONV generated at 1732:20Z, 09 SEP 1998 for channel IPC.

---

**NOTE:** Each ALERT statement that appears within the Action Summary indicates only that ECPN has *generated* an alert in response to a certain alert condition. This statement does not indicate that an alert was *sent* to one or more users. To ensure that the appropriate users are notified of an alert condition, you must add an entry to the alert notification database (as described in [Section 6.3](#)).

---

### To reroute one or more errored messages

If an X12 or *outgoing* UDF message contains an error, you may reroute the message, which sends the message back to the router. When the router receives the message, it reevaluates the message's routes to determine any destinations that have not been satisfied because of failed routes (e.g., from an outgoing translation) or changes made to the routing database.

For a *typical message*, the router checks the message's routes against the entries in the routing database. If the routing criteria for the message include a destination of an email channel, the router also checks the SEND TO list in the edit channel window ([Figure 4.1-24](#)) for the email channel. If the router identifies any destinations that have not yet received the message, it sends the message to those destinations. For a *system-generated message* (a traffic report or an 824/997 acknowledgement), the router checks the message's routes against the settings in the ADMIN tab of the edit channel window ([Figure 4.1-20](#)) for the associated channel. If the router finds any modified settings or new email addresses, it sends the message to those destinations. For a *child message* (a SAACONS 838 or an EDA index file), the router reroutes the message to any failed or cancelled route that was assigned during original routing.

When a message that failed routing is rerouted successfully, the system sends the message only to the site(s) that had routing problems or that did not exist the first time that the message was processed. Each site that successfully received the message during the initial processing does not receive it again.

Before rerouting a message, you may need to modify one of the following elements to ensure that the error does not occur again during rerouting:

- Routing database (described in [Section 5.1](#))
- Trading partner database (described in [Section 5.2](#))
- SEND TO list in the edit channel window (as described in [Section 4.1.7](#))
- ADMIN tab in the edit channel window (as described in [Section 4.1.3](#))

To learn what type of error occurred in order to determine what type of modifications to make, open the [JDS Viewer](#) and consult the [Error Description](#) field.

For example, if the **Error Description** field indicates that no routing entry exists in the routing database, you should add an entry to the database and then reroute the message; or, if the **Error Description** field indicates that a TPDB look-up error exists in an outgoing UDF message, you should modify the corresponding TPDB entry and then reroute the message.

To reroute one or more errored messages: In the **Message Log** window, select each message and then select **Message > Reroute**. When you reroute an errored message, ECPN removes it from the error queue (described in [Section 3.2](#)). If the message is not rerouted successfully, it is placed back in the error queue.

### To retranslate one or more errored messages

If an *incoming* UDF message contains a trading partner database (TPDB) look-up error, you can retranslate the message, which sends the errored message back to the UDF→X12 translator to be translated again. To determine what type of error is present in the message, examine the **Error Description** field of the [JDS Viewer](#) ([Figure 3.1-4](#)). If the **Error Description** field indicates that a TPDB look-up error is present in an incoming UDF message, you should modify the corresponding TPDB entry (described in [Section 5.2](#)) before retranslating the message.

When an errored message is retranslated, the system does the following:

- Removes the original message from the error queue (described in [Section 3.2](#)).
- Creates a new message (with a new MSN) for the retranslated message text. If the message is retranslated successfully, this new message is placed in the message log; if retranslation fails, the new message is also placed in the error queue. To find out the MSN of the retranslated message, open the [JDS Viewer](#) for the original message and consult the [Linkages](#) field.
- Sends an 824 acknowledgement to the remote site that transmitted the UDF or to designated email recipients reporting the success or failure of the retranslation. (ECPN sends an 824 acknowledgement only if the channel is configured to send acknowledgements, as explained in [Section 4.1.3](#).)

To retranslate one or more errored UDF messages: In the **Message Log** window, select each message and then select **Message > Retranslate**.

**To annotate one or more messages**

1. In the Message Log window, select each message and then select **Message > Annotate**. The Annotation Editor window appears. Note that if you are entering notes for more than one message, only one window appears, and the notes you enter in it are applied to each message.

*Figure 3.1-5 Annotation Editor Window*



2. In the text box, enter any notes to record about the message.
3. Click **APPEND**. Once attached to a message, the notes appear in the Annotations field of the JDS Viewer ([Figure 3.1-4](#)). Each annotation is preceded by the name of the ECPN administrator who entered it and the time that it was entered. Note that once you attach notes to a message, you cannot edit them; however, you can attach as many additional notes to a message as you wish.

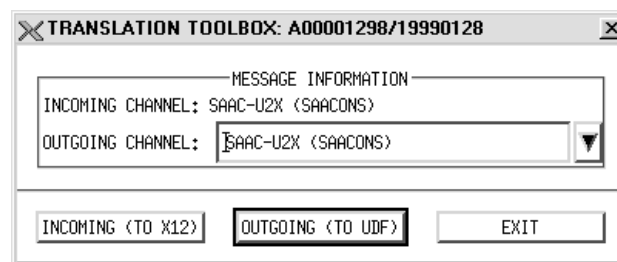


## To manually translate a message

The translation toolbox enables you to manually translate a message from X12→UDF and UDF→X12, view the results of the translation, and access the audit log and trace files to troubleshoot any translation errors in the message.

1. To manually translate a message: In the **Message Log** window, select the message and then select **Message > Translation Toolbox**. The **TRANSLATION TOOLBOX** window appears, displaying the MSN of the selected message in the title bar. (Note that you can also translate a message from the **Error Queue** window, as described in [Section 3.2](#).)

Figure 3.1-6 TRANSLATION TOOLBOX Window



The **INCOMING CHANNEL** field in the **MESSAGE INFORMATION** box displays the name and message type (e.g., X12, IPC, SAACONS) of the channel that received the message.

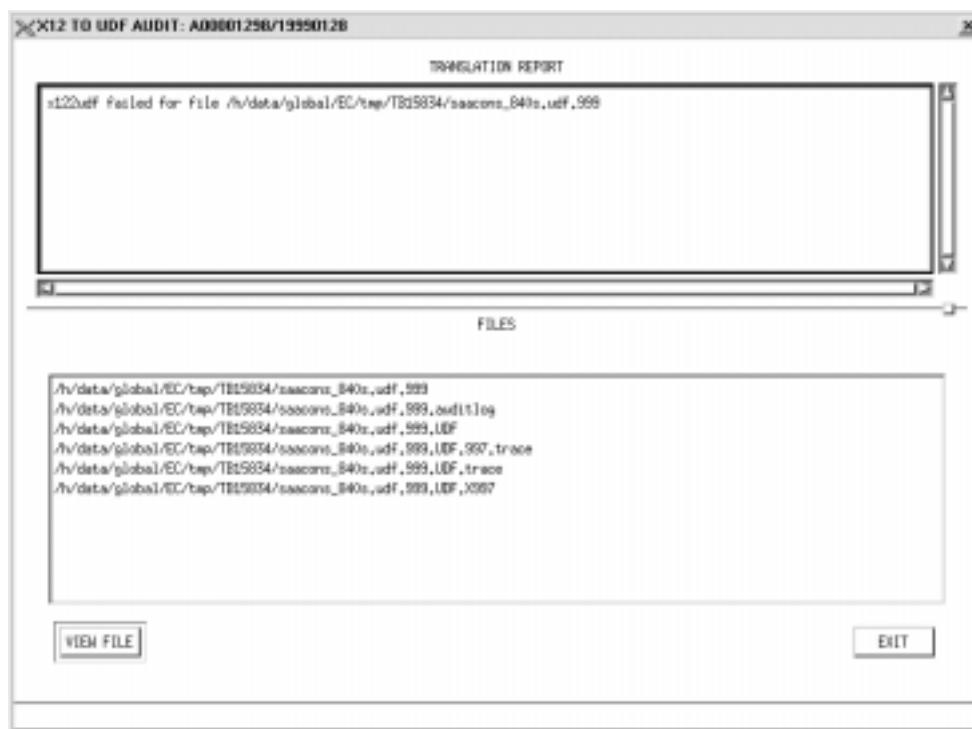
2. From the drop-down list box adjacent to the **OUTGOING CHANNEL** field, select a channel. Possible selections include only the outgoing (or destination) channels that were associated with the incoming channel *and* were **ON** in the routing database (discussed in [Section 5.1](#)) at the time the message was received by ECPN.

Note that if the incoming channel is an X12 channel, you *must* select a UDF channel in the **OUTGOING CHANNEL** field. You cannot translate an X12 message to X12.

3. Select one of the translation options as follows:
  - a. To translate an incoming UDF message to X12, click **INCOMING (TO X12)**. Note that this button is not available for selection for incoming X12 messages.
  - b. To translate either an outgoing X12 message to UDF or an outgoing UDF message to another UDF format, click **OUTGOING (TO UDF)**.

The translation audit window appears, displaying in the title bar the type of translation (e.g., X12 to UDF, UDF to X12) and the MSN of the selected message.

*Figure 3.1-7 Translation Audit Window*



The TRANSLATION REPORT box displays information about the translation, such as whether the translation was successful and the name and location of the temporary message file created during the translation.

The FILES box lists all of the files that were generated during the translation. These files are stored in a temporary directory on the system named, /h/data/global/EC/tmp. The files listed in the FILES box may vary, depending on the type of translation (X12→UDF or UDF→X12), the content of the message, and whether the translation was successful.

Table 3.1-5 provides an overview of the files that may be generated during the translation.

Table 3.1-5 Translation Toolbox Generated Files

Translation type	File name/extension	Description
X12→UDF or UDF→UDF	<filename>	The original X12 file as it was received by ECPN.
	.auditlog	The audit log of the translation, generated by the Mercator® program. Contains status codes, indicating whether a particular string of data is valid, caused an error, or caused a warning.
	.error	A list of any trading partner database (TPDB) look-up errors that occurred during the translation.
	.UDF	The UDF generated as a result of a successful translation. Note that this file may be listed if translation failed; however, the file may be empty.
	.UDF.trace	The trace file for the translation, generated by the Mercator program. It contains a record of the actions that occurred during the execution of the map.
<p><b>NOTE:</b> The Mercator audit and trace files require some understanding of mapping. For more information on interpreting these files, see the <i>Mercator Map Editor Reference Guide</i>.</p>		

Table 3.1-5 Translation Toolbox Generated Files (Continued)

Translation type	File name/extension	Description
UDF→X12	<filename>.1.O	The original UDF as received by ECPN.
	.premap	A table of the sizes of the transactions in the original and modified files. Used to parse the message file into individual transactions.
	.premap.trace	The trace file for the premap, generated by the Mercator program. The premap is used to preformat the message (e.g., insert padding), if necessary, to help the translator parse the message.
	.1.M	The preformatted, parsed file that was sent through the UDF→X12 map. The 1 in the file extension indicates that it is the first transaction in the original file. (The second transaction's extension is .2.M, and so on.)
	.824.trace	A Mercator-generated file for the map used to generate the 824 acknowledgement for the transaction.
	.out	The preformatted file that was parsed and sent through the UDF→X12 map.
	.auditlog	The Mercator-generated audit log of the translation. A separate audit log is generated for each transaction in the message.
	.trace	The Mercator-generated trace file for the translation. A separate trace file is generated for each transaction in the message.
	.X12	The X12 file generated as a result of a successful translation.
	.X824	The 824 transaction generated as a result of the UDF→X12 translation.
	.File_info	A file generated by the translator for Integrated Payment and Collecting (IPC) message types. Contains information about the success or failure of the translation of each of the interrelated transactions. For more information about IPC mapping, see the IPC map description for the channel (as described in <a href="#">Section 4.1.2</a> ).

**NOTE:** The Mercator audit and trace files require some understanding of mapping. For more information on interpreting these files, see the *Mercator Map Editor Reference Guide*.

4. (Optional) To view a file generated during translation: In the **FILES** box, double-click the file, or click it once and then click **VIEW FILE**.

## 3.2 Error Queue

If a message fails translation, decoding, or routing, it is placed in the error queue. The error queue holds *all* of the messages that contain errors, and unlike the message log (discussed in [Section 3.1](#)), the error queue contains messages that span more than one day. The **Error Queue** option enables you to view the error queue.

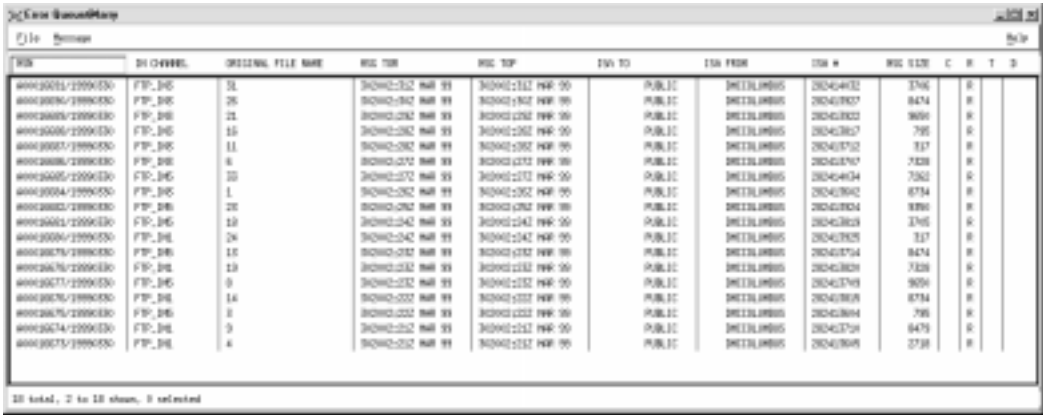
Using the **Error Queue** option, you can do the following:

- [View](#) the error queue
- View a [raw message](#)
- View the [JDS for a message](#)
- [Reroute](#) one or more messages
- [Retranslate](#) one or more messages
- [Delete](#) one or more messages
- [Annotate](#) one or more messages
- [Translate](#) a message and [troubleshoot](#) translation errors

To view the error queue

Select Messages > Error Queue. The Error Queue window appears, displaying all of the messages containing errors.

Figure 3.2-1 Error Queue Window



MSG	IN CHANNEL	ORIGINAL FILE NAME	MSG TOR	MSG TOP	EXP TO	EXP FROM	MSG #	MSG SIZE	C	R	T	D
00001001/1000130	FTP_045	31	00001001:002	000 00	00001001:002	000 00	00001001	00001001	00001001	00001001	00001001	00001001
00001002/1000130	FTP_045	25	00001002:002	000 00	00001002:002	000 00	00001002	00001002	00001002	00001002	00001002	00001002
00001003/1000130	FTP_045	21	00001003:002	000 00	00001003:002	000 00	00001003	00001003	00001003	00001003	00001003	00001003
00001004/1000130	FTP_045	15	00001004:002	000 00	00001004:002	000 00	00001004	00001004	00001004	00001004	00001004	00001004
00001005/1000130	FTP_045	11	00001005:002	000 00	00001005:002	000 00	00001005	00001005	00001005	00001005	00001005	00001005
00001006/1000130	FTP_045	6	00001006:002	000 00	00001006:002	000 00	00001006	00001006	00001006	00001006	00001006	00001006
00001007/1000130	FTP_045	10	00001007:002	000 00	00001007:002	000 00	00001007	00001007	00001007	00001007	00001007	00001007
00001008/1000130	FTP_045	1	00001008:002	000 00	00001008:002	000 00	00001008	00001008	00001008	00001008	00001008	00001008
00001009/1000130	FTP_045	20	00001009:002	000 00	00001009:002	000 00	00001009	00001009	00001009	00001009	00001009	00001009
00001010/1000130	FTP_045	18	00001010:002	000 00	00001010:002	000 00	00001010	00001010	00001010	00001010	00001010	00001010
00001011/1000130	FTP_045	24	00001011:002	000 00	00001011:002	000 00	00001011	00001011	00001011	00001011	00001011	00001011
00001012/1000130	FTP_045	12	00001012:002	000 00	00001012:002	000 00	00001012	00001012	00001012	00001012	00001012	00001012
00001013/1000130	FTP_045	19	00001013:002	000 00	00001013:002	000 00	00001013	00001013	00001013	00001013	00001013	00001013
00001014/1000130	FTP_045	9	00001014:002	000 00	00001014:002	000 00	00001014	00001014	00001014	00001014	00001014	00001014
00001015/1000130	FTP_045	14	00001015:002	000 00	00001015:002	000 00	00001015	00001015	00001015	00001015	00001015	00001015
00001016/1000130	FTP_045	1	00001016:002	000 00	00001016:002	000 00	00001016	00001016	00001016	00001016	00001016	00001016
00001017/1000130	FTP_045	9	00001017:002	000 00	00001017:002	000 00	00001017	00001017	00001017	00001017	00001017	00001017
00001018/1000130	FTP_045	4	00001018:002	000 00	00001018:002	000 00	00001018	00001018	00001018	00001018	00001018	00001018

The message s in this window appear sorted according to MSN. The message processed most recently (i.e., the message with the highest MSN) appears first in the log. For instructions on how to change the sort order of MSNs in the queue, see [Section 1.3](#).

**TIP:** Each message processing error is classified by one of the following four categories: communications (C), routing (R), translation (T), or message decoding (D). The C, R, T, and D columns indicate which error type(s) occurred in a message. To quickly find messages with a certain error type, sort the messages in the error queue by one of these four columns.

This window displays an entry under the following column headings for each message in the error queue.

MSN

Message sequence number assigned to an incoming decoded message in the order of processing by the router. The MSN has the format SNNNNNNNNN/YYYYMMDD (explained in [Table 1.1-2](#)).

IN CHANNEL

Channel over which the message was received.

ORIGINAL FILE NAME

Name of the file containing the message, as originally received by ECPN.

MSG TOR

Time of message receipt by the channel.

**MSG TOP**

Time of message processing by the router (when the message is assigned an MSN).

**ISA TO**

Interchange receiver name (from the ISA08 field of the X12 message).

**ISA FROM**

Interchange sender name (from the ISA06 field of the X12 message).

**ISA #**

Interchange control number (from the ISA13 field of the X12 message).

**MSG SIZE**

Size of the message in bytes.

**C**

Communications error indicator. An entry of **C** signals that the message contains a communications error, such as a segment terminator conversion error. A blank field indicates that the message does not contain a communications error.

**R**

Routing error indicator. An entry of **R** indicates that the message failed routing for any number of reasons, perhaps because no routing entry exists for the message. A blank field indicates that the message does not contain a routing error.

**T**

Translation error indicator. An entry of **T** signals that the message failed either incoming or outgoing translation. A blank field indicates that the message does not contain a translation error.

**D**

Decoding error indicator. An entry of **D** indicates that the message failed decoding for any number of reasons, including problems with the message's format. A blank field indicates that the message does not contain a decoding error.

**To view a raw message**

In the Error Queue window, select the message and then select **Message > Raw Message**. The Raw Viewer ([Figure 3.1-3](#)) appears. For a description of this window, see *To view a raw message* in [Section 3.1](#).



**To view the JDS for a message**

In the Error Queue window, double-click the message, or click it once and then select **Message > Formatted Message (JDS)**. The JDS Viewer ([Figure 3.1-4](#)) appears. For a description of this window, see *To view the JDS for a message* in [Section 3.1](#).

**To reroute one or more messages**

For a description of rerouting as it pertains to errored messages, see *To reroute one or more errored messages* in [Section 3.1](#).

To reroute one or more errored messages: Select each message in the Error Queue window, and then select **Message > Reroute**. When you reroute an errored message, ECPN removes it from the error queue (described in [Section 3.2](#)). If the message is not rerouted successfully, it is placed back in the error queue.

**To retranslate one or more messages**

For a description of retranslation as it pertains to errored messages, see *To retranslate one or more errored messages* in [Section 3.1](#).

To retranslate one or more errored UDF messages: Select each message in the Error Queue window, and then select **Message > Retranslate**.

**To delete one or more messages**

In the Error Queue window, select each message and then select **Message > Delete**. The message no longer appears in the Error Queue window. Deleting a message from the error queue does not remove it from the system. It still remains in the message log and appears in the Message Log window (described in [Section 3.1](#)).

**To annotate one or more messages**

In the Error Queue window, select each message and then select **Message > Annotate**. The Annotation Editor window ([Figure 3.1-5](#)) appears. For instructions on using this window, see *To view the JDS for a message* in [Section 3.1](#).

## To translate a message

The translation toolbox enables you to translate a message from X12→UDF and UDF→X12, view the results of the translation, and access the audit log and trace files to troubleshoot any translation errors that occur in the message.

To translate a message: In the Error Queue window, select the message and then select **Message > Translation Toolbox**. The TRANSLATION TOOLBOX window (Figure 3.1-6) appears. For more information on using the translation toolbox, see [To translate a message](#) in [Section 3.1](#).

### 3.3 Outgoing Email Queues

All outgoing email messages are sent to a central email queue and then placed in individual domain queues, based on the **SEND TO** address information specified in each email channel's configuration window (as discussed in [Section 4.1.7](#)). The individual queues contain outgoing messages addressed to the same remote host (domain) and may contain messages from more than one channel. ECPN connects to the remote host for each domain and transmits all of the messages contained in the queue for that domain. After transmission, messages are removed from the domain queue. You can see the exact text of a transmitted message file through the Out Channel Log Viewer ([Figure 4.1-10](#)).

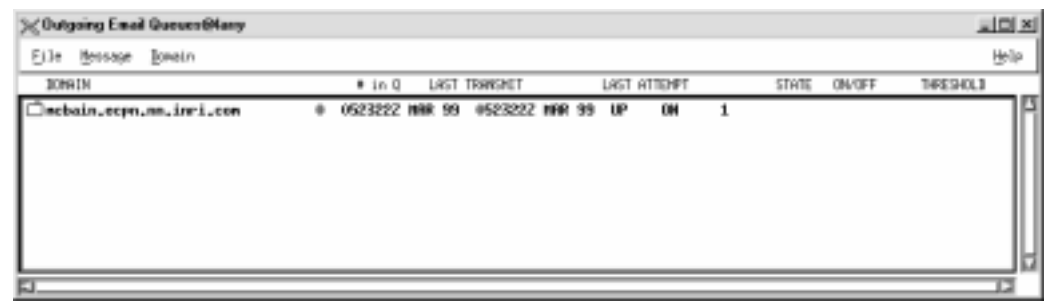
Using the Outgoing Email Queues option, you can do the following:

- View [queues](#) of outgoing email messages
- View each [message](#) queued to a domain
- View the [JDS](#) for a message
- [Delete a message](#)
- [Enable or disable](#) a domain for message transmission
- Specify a [connection failure threshold](#) for a domain
- [Delete a domain](#)

#### To view queues of outgoing email messages

Select Messages > Outgoing Email Queues. The Outgoing Email Queues window appears.

Figure 3.3-1 Outgoing Email Queues



This window displays the following information for each domain queue:

#### DOMAIN

Name of the domain to which the outgoing email message will be transmitted.

#### # in Q

Number of email messages that are queued for transmission to the domain.

**LAST TRANSMIT**

Time of the last successful message transmission by ECPN to the domain.

**LAST ATTEMPT**

Time of ECPN's most recent attempt to connect to the domain. Note that the times displayed in the **LAST TRANSMIT** and **LAST ATTEMPT** columns differ only if ECPN was unable to connect to the domain on the previous attempt.

**STATE**

Status of the connection to the domain. Possible values are listed in [Table 3.3-1](#).

*Table 3.3-1 Email Connection Status*

State	Condition
---	ECPN has not yet attempted to connect to the domain.
UP	ECPN has connected to the domain, and the transmission was successful.
DOWN	<p>ECPN cannot connect to the domain; transmission failed. Two conditions can cause connection failure: 1) intermittent outages on the network or 2) an incorrect email address in the <b>SEND TO</b> field of the <b>Edit Email</b> window (<a href="#">Figure 4.1-24</a>). If Condition 1 occurs, ECPN will continue to try to connect to the domain. When the network is functioning properly, the messages will be transmitted. If Condition 2 occurs, you should perform <i>each</i> of the following steps.</p> <ol style="list-style-type: none"><li>1. Remove all of the messages in the domain queue and place them in the error queue (as described in <a href="#">To delete a message</a>).</li><li>2. Check the email address in the <b>SEND TO</b> field of the <b>Edit Email</b> window and make changes as necessary (as described in <a href="#">Section 4.1.7</a>).</li><li>3. <a href="#">Reroute</a> the messages from the error queue (as described in <a href="#">Section 3.2</a>).</li><li>4. Delete the old domain queue (as described in <a href="#">To delete a domain</a>) — that is, the queue from which you cancelled the messages.</li></ol>

**ON/OFF**

Indicates the domain's current setting, either **ON** or **OFF**.

**THRESHOLD**

Setting for connection failure threshold.

### To view each message queued to a domain

In the Outgoing Email Queues window, click the domain name. The MSN for each of the queued messages appears under the domain name.

### To view the JDS for a message

In the Outgoing Email Queues window, double-click the message, or click it once and then select **Message > View Message**. The JDS Viewer ([Figure 3.1-4](#)) appears. For a description of this window, see *To view the JDS for a message* in [Section 3.1](#).

### To delete a message

You can delete a message from the Outgoing Email Queues window in one of two ways:

- a. To delete a message from the outgoing email queue before transmittal, select the message and then select **Message > Delete**.
- b. To delete a message from the outgoing email queue before transmittal *and* place it in the error queue, select the message and then select **Message > Delete to Error Queue**. For a description of the error queue, see [Section 3.2](#).

You *cannot* delete a message while a domain is enabled (on). If you try to delete a message while a domain is enabled, a warning window notifies you that you must disable the domain before selecting one of the delete options.

Deleting a message can be reversed — in other words, you can send a message back to the outgoing email queue once it has been deleted. To do so, reroute the message from either the message log (as described in [Section 3.1](#)) or the error queue (as described in [Section 3.2](#)).

### To enable a domain for message transmission

In the Outgoing Email Queues window, select the domain and then select **Domain > Enable Transmit**. The domain is enabled to transmit and receive messages.

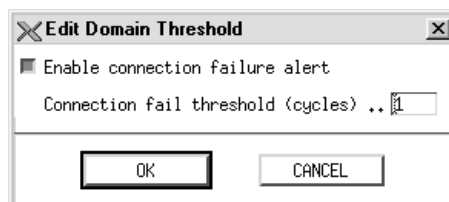
### To disable a domain for message transmission

In the Outgoing Email Queues window, select the domain and then select **Domain > Disable Transmit**. The domain is disabled and cannot transmit and receive messages.

### To specify a connection failure threshold for a domain

1. In the Outgoing Email Queues window, select a domain and then select Domain > Alert Threshold. The Edit Domain Threshold window appears.

*Figure 3.3-2 Edit Domain Threshold Window*



2. Select or clear the Enable connection failure alert check box to specify whether an alert will be generated if the system cannot connect to the remote host (domain) after the number of attempts specified in the Connection fail threshold field.

Note that when a new domain is added, the Enable connection failure alert check box is selected by default, and a 1 appears in the Connection fail threshold field.

3. In the Connection fail threshold field, enter the number of times the system must fail to connect to the domain before an alert is generated.

For example, if you enter 1 in the Connection fail threshold field, an alert will be generated if the system cannot connect to the domain on the first attempt. If you enter 3 in this field, an alert will be generated if the system cannot connect to the domain after the third consecutive attempt.

### To delete a domain

In the Outgoing Email Queues window, select the domain and then select Domain > Delete Domain. The domain and any messages queued to it are deleted.

## 3.4 Rejected Email

When an incoming email message enters the ecedi mailbox, it is processed and forwarded to the message log. However, if an incoming email message cannot be processed by ECPN, an alert is generated, and the rejected message is removed from the ecedi mailbox and placed in the rejected email mailbox. Incoming messages may be rejected by ECPN for two reasons: no specified channel or an unknown sender.

Rejected messages are stored in the rejected email mailbox until they are either deleted or corrected and then reinjected into the message log.

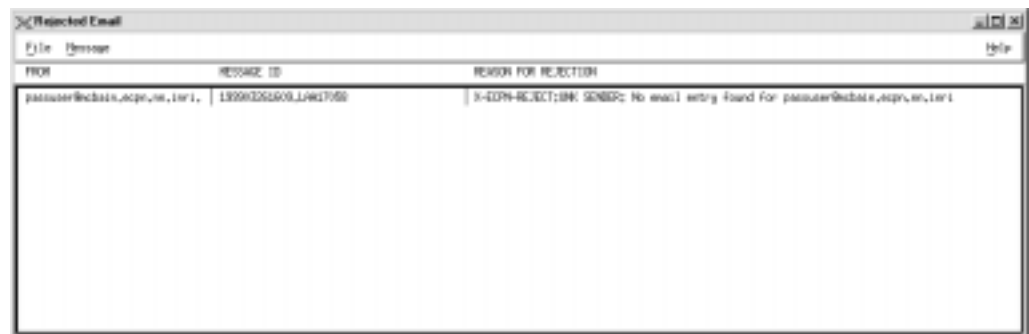
Using the Rejected Email option, you can do the following:

- [View](#) the rejected email mailbox
- [View](#) a rejected message
- [Reinject](#) a corrected message into the message log
- [Delete](#) one or more rejected messages

### To view the rejected email mailbox

Select Messages > Rejected Email. The Rejected Email window appears.

*Figure 3.4-1 Rejected Email Window*



This window displays the following information for each message in the rejected email mailbox:

**FROM**

Email address of the sender.

**MESSAGE ID**

Identifier for the message assigned by the sender's mail system.

**REASON FOR REJECTION**

Alert statement from the alert log and a brief explanation of the cause for the alert condition. For an alphabetical listing of the alert statements and suggested corrective actions, see [Appendix B](#).

**To view a rejected message**

In the Rejected Email window, double-click the message, or click it once and then select **Message > View**. The View Message window appears.

*Figure 3.4-2 View Message Window*



The View Message window enables you to scroll through the email header and body of the message.



## To reinject a corrected message into the message log

1. In the Rejected Email window, examine the REASON FOR REJECTION field to determine the cause of the error. A message can be rejected by ECPN for two reasons: the specified email channel is not turned on (**NO CHANNEL** alert) or the sender is unknown (**UNK SENDER** alert). You must correct the error condition before reinjecting the message; otherwise, the message will simply be placed in the rejected email mailbox again.
  - a. To correct a **NO CHANNEL** alert condition, ensure that the email channel has been properly added to the communications channel database and that the channel is on (as discussed in [Section 4.1](#)).
  - b. To correct an **UNK SENDER** alert condition, check the **EMAIL** tab of the edit channel window for the channel to verify that the sender's address has been correctly entered in the **RECEIVE FROM** field (as discussed in [Section 4.1.7](#)). If no entry appears in this field, enter the address (as discussed in [Section 4.1.7, Step 3](#)).
2. After correcting the problem, select the rejected message in the Rejected Email window and then select **Message > Reinject** to send the message to the message log. The message will then be deleted from the rejected email mailbox.

Note that the time entered in the **MSG TOR** field of the **Message Log** window will be the time the message was reinjected, and not the time the message was originally received in the ecedi mailbox. For more information on the message log, see [Section 3.1](#).

## To delete one or more rejected messages

In the Rejected Email window, select each message and then select **Message > Delete**. Note that until a rejected message is corrected and reinjected, it is listed in the rejected email mailbox. Therefore, deleting a rejected message from the rejected email mailbox removes the message from ECPN.

## 3.5 Incoming X12 Queue

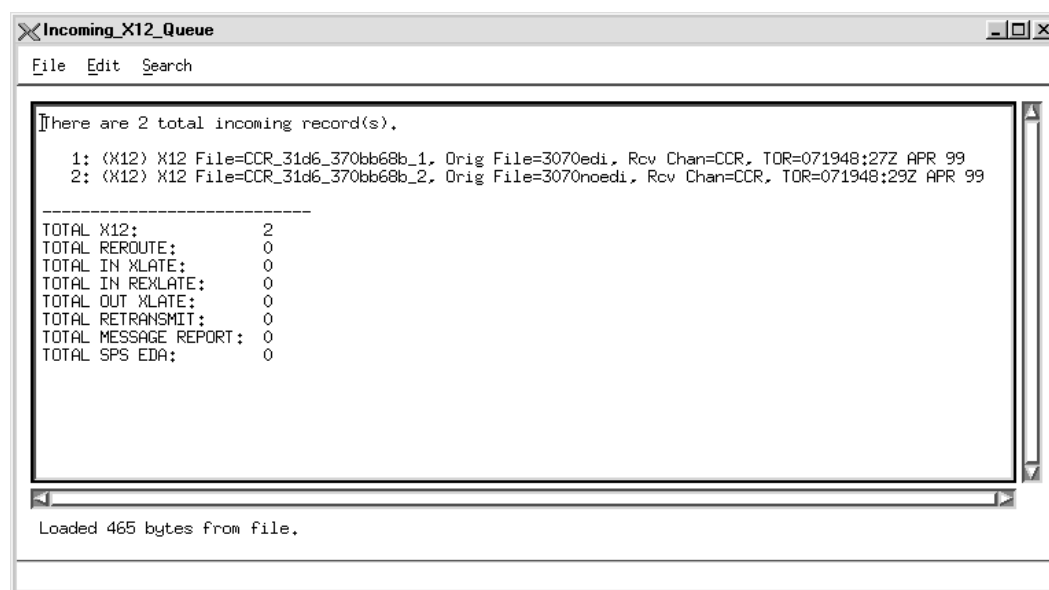
The Incoming X12 Queue option enables you to view a queue of X12 messages and X12 files waiting for processing by the router. An *X12 message* contains information about a single ISA/IEA pair segment as well as a formatted version of the message text, whereas an *X12 file* contains one or more X12 messages. An *X12 message* arrives at the incoming X12 queue by one of five paths: from rerouting, retransmitting, incoming translation, retranslation, or the X12→UDF translator (in the form of a 997 acknowledgement). An *X12 file* reaches this queue in one of two ways: from incoming X12 communication channels or the MsgReporter utility (a software process within ECPN described in [Appendix J](#) of the *System Administrator's Guide for Electronic Commerce Processing Node*).

After the router processes an *X12 message*, the message is placed in the message log (described in [Section 3.1](#)). If the router encounters an error, the message is also placed in the error queue (described in [Section 3.2](#)). After the router processes an *X12 file*, the file is removed from the incoming X12 queue, and the resulting message(s) are placed in the message log and, if necessary, in the error queue.

### To view a queue of incoming X12 messages and X12 files awaiting routing

Select Messages > Incoming X12 Queue. The Incoming X12 Queue window appears.

Figure 3.5-1 Incoming X12 Queue Window



The lower portion of this window displays (in table format) a summary of the types of X12 entries in the queue and the total number of entries for each type. Above the table, a listing appears of the individual files or messages in the queue, grouped by entry type. The listing includes information unique to the entry type, such as the original file name or the receiving channel. Each entry type, its format (file or message), origination point, and listing information is described in [Table 3.5-1](#).

*Table 3.5-1 Summary of X12 Entries in the Queue*

Entry type	Format	Origination point	Listing information
TOTAL X12	File	Incoming communications	X12 File – Temporary file name assigned upon arrival at ECPN. Orig File – Name of the file as received by ECPN originally. Rcv Chan – Channel over which the file was received. TOR – Time of receipt for the file.
TOTAL REROUTE	Message	Rerouting from message log or error queue	MSN – Message sequence number assigned to an incoming decoded message in the order of receipt.
TOTAL IN XLATE	Message	UDF→X12 translator	Orig File – Name of the file as received by ECPN originally. Rcv Chan – Channel over which the file was received. TOR – Time of receipt for the file.
TOTAL IN REXLATE	Message	Retranslating from message log or error queue	MSN – Message sequence number assigned to an incoming decoded message in the order of receipt.
TOTAL OUT XLATE	Message	X12→UDF translator (The X12 is a 997 acknowledgement to be sent to the message sender or specified recipient.)	MSN – Message sequence number assigned to an incoming decoded message in the order of receipt. Route Seq # – Internal ECPN tracking number. 997 File – Temporary file name of the generated 997 file.

*Table 3.5-1 Summary of X12 Entries in the Queue (Continued)*

Entry type	Format	Origination point	Listing information
TOTAL RETRANSMIT	Message	Retransmitting from outgoing channel log	Out Chan – Channel over which the message will be retransmitted. Mod Name – Name of the ECPN administrator who retransmitted the message. Mod Host – Name of host machine where message was retransmitted. Index – Internal ECPN log index. Log Date – Date of the log.
TOTAL MESSAGE REPORT	Message Report File	MsgReporter utility	Chan name – Channel for which the report was generated. Report Date – Date to which the report's statistics apply.
TOTAL SPS EDA	File	Incoming communications	Channel – Channel over which the file was received. Postscript – Name of the postscript file. Index File – Name of the index file.

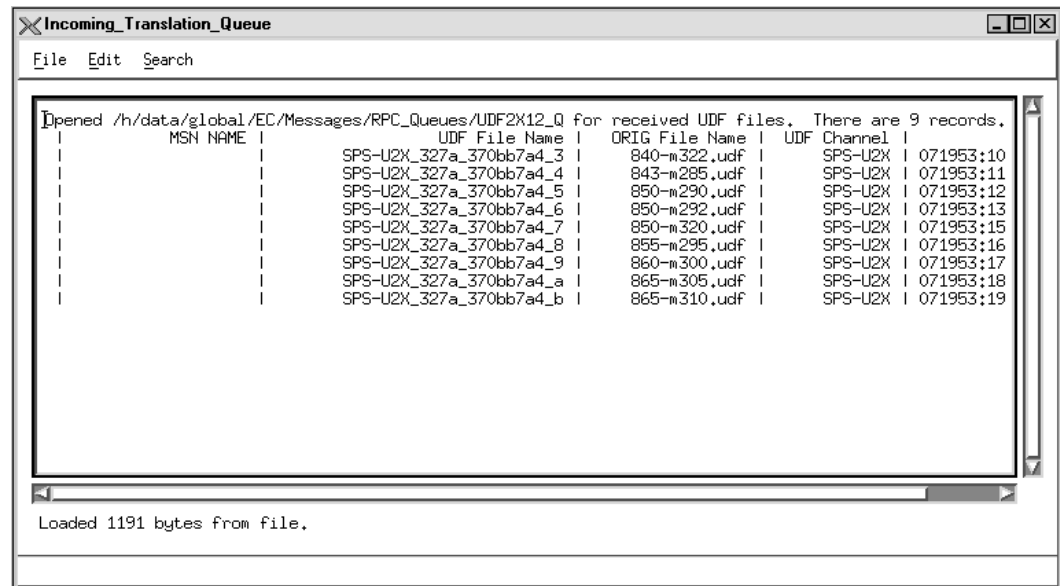
## 3.6 Incoming Translation Queue

As UDFs enter ECPN through the communication channels, they are placed in the incoming translation queue for translation to X12 messages. The Incoming Translation Queue option enables you to view this queue of incoming UDFs awaiting translation by the UDF→X12 translator. Once a UDF is translated, it is removed from the incoming translation queue and placed in the incoming X12 queue (described in [Section 3.5](#)).

### To view a queue of incoming UDFs awaiting translation

Select Messages > Incoming Translation Queue. The Incoming Translation Queue window appears.

Figure 3.6-1 Incoming Translation Queue Window



This window displays an entry under the following column headings for each incoming UDF awaiting processing by the UDF→X12 translator. The text above the column headings confirms the location and number of the UDFs.

#### MSN NAME

Message sequence number assigned to an incoming decoded message in the order of receipt. The MSN has the format SNNNNNNNN/YYMMDD (explained in [Table 1.1-2](#)).

Note that only retranslated messages display an entry in this column because messages must be processed by the router *before* being assigned an MSN.

**UDF File Name**

Temporary file name assigned to a UDF upon arrival at ECPN *before* it is translated to an X12 file.

**ORIG File Name**

The name of the UDF as originally received by ECPN.

**UDF Channel**

Channel over which the UDF was received.

**TOR**

Time of receipt for the UDF.

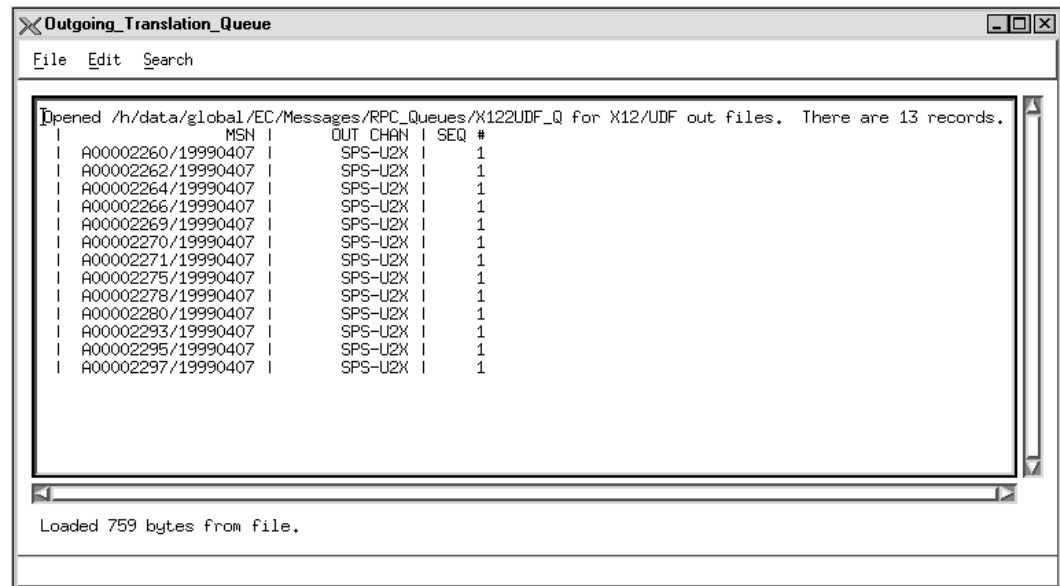
## 3.7 Outgoing Translation Queue

The Outgoing Translation Queue option enables you to view a queue of outgoing messages pending translation from X12 to UDF. The X12→UDF translator converts X12 messages in this queue to UDFs so that their format matches the UDF message type set for the channels transmitting them. After translation, the files are removed from this queue and placed in a queue of outgoing files for a channel (as described in [Section 4.1](#)).

### To view a queue of outgoing X12 messages pending translation

Select Messages > Outgoing Translation Queue. The Outgoing Translation Queue window appears.

Figure 3.7-1 Outgoing Translation Queue Window



This window displays an entry under the following column headings for each outgoing X12 message awaiting translation to UDF. The text above the column headings confirms the location and number of the X12 messages.

**MSN**

Message sequence number assigned to an incoming decoded message in the order of receipt. The MSN has the format SNNNNNNNN/YYYYMMDD (explained in [Table 1.1-2](#)).

**OUT CHAN**

Channel over which the UDF will leave ECPN.

**SEQ #**

Internal ECPN tracking number.



## Section 4

# Communications

---

The options on the Communications menu enable you to establish and monitor communications channels to process incoming and outgoing messages.

The Communications menu provides the following options:

### **Communications Manager**

To view and manage the communications channel database. ([Section 4.1](#))

### **Communications Status**

To view the current status of all ECPN communications channels. ([Section 4.2](#))

## 4.1 Communications Manager

The communications channel database stores information on the channels that connect ECPN to VANs, gateways, and AISs. The **Communications Manager** option enables you to view the communications channel database and to perform various database management tasks.

Using the **Communications Manager** option, you can do the following:

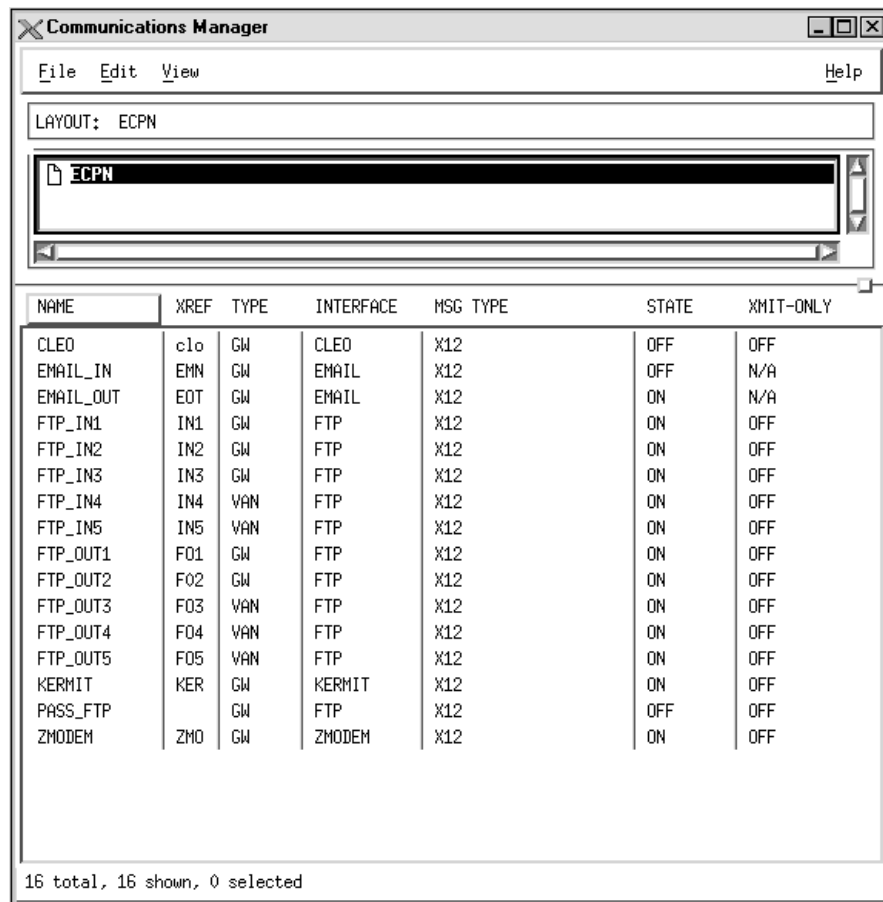
- [View](#) the communications channel database
- [Modify](#) the column layout
- [Manage channels](#)
- [Start](#) or [stop](#) one or more channels
- View a [session log](#) for a channel
- View the [incoming channel log](#) for a channel
- View the [outgoing channel log](#) for a channel
- View the outgoing message queue for a [non-email](#) channel or for all [email](#) channels
- [Activate](#) or [deactivate](#) transmit-only mode for one or more channels
- [Add](#) a channel
- [Delete](#) a channel
- [Edit](#) a channel

This section discusses active communications only. For information on passive communications, refer to the *System Administrator's Guide for Electronic Commerce Processing Node*.

## To view the communications channel database

Select Communications > Communications Manager. The Communications Manager appears, displaying the contents of the communications channel database.

Figure 4.1-1 Communications Manager



The screenshot shows a window titled "Communications Manager" with a menu bar (File, Edit, View, Help) and a "LAYOUT: ECPN" label. Below this is a list box containing "ECPN". The main area displays a table with the following data:

NAME	XREF	TYPE	INTERFACE	MSG TYPE	STATE	XMIT-ONLY
CLE0	c1o	GW	CLE0	X12	OFF	OFF
EMAIL_IN	EMN	GW	EMAIL	X12	OFF	N/A
EMAIL_OUT	EOT	GW	EMAIL	X12	ON	N/A
FTP_IN1	IN1	GW	FTP	X12	ON	OFF
FTP_IN2	IN2	GW	FTP	X12	ON	OFF
FTP_IN3	IN3	GW	FTP	X12	ON	OFF
FTP_IN4	IN4	VAN	FTP	X12	ON	OFF
FTP_IN5	IN5	VAN	FTP	X12	ON	OFF
FTP_OUT1	F01	GW	FTP	X12	ON	OFF
FTP_OUT2	F02	GW	FTP	X12	ON	OFF
FTP_OUT3	F03	VAN	FTP	X12	ON	OFF
FTP_OUT4	F04	VAN	FTP	X12	ON	OFF
FTP_OUT5	F05	VAN	FTP	X12	ON	OFF
KERMIT	KER	GW	KERMIT	X12	ON	OFF
PASS_FTP		GW	FTP	X12	OFF	OFF
ZMODEM	ZM0	GW	ZMODEM	X12	ON	OFF

At the bottom of the window, it says "16 total, 16 shown, 0 selected".

The window displays an entry under the following column headings for each channel in the database:

### NAME

Unique channel name.

### XREF

One- to three-character communications cross-reference code for the channel.

### TYPE

Type of node site; either GW (gateway), VAN (Value-Added Network), AIS (Automated Information System), or CCR (Centralized Contractor Registration).

**INTERFACE**

Type of interface used by the channel; either CLEO, EMAIL, FTP, KERMIT, or ZMODEM.

**MSG TYPE**

Type of messages to be processed by the channel; either X12 (X12 protocol) or one of the UDF formats (e.g., IPC, ITIMP, SPS).

**STATE**

Indicates the channel's current state for receiving and transmitting messages; either ON or OFF. Each channel is color-coded to reflect its state as described in [Table 4.1-1](#).

*Table 4.1-1 Channel State Indicators*

Status	Color	Definition	For more information, consult
ON	Cyan	The channel is active and initiates communications sessions according to the frequency specified in the <a href="#">communications scheduler</a> .	<i>To start one or more channels</i>
OFF	White	The channel is inactive and does not initiate any communications sessions.	<i>To stop one or more channels</i>

Note that the channel's state does not necessarily reflect the channel's current *status*. (For example, a channel may be in the ON state but have a status of DOWN or IDLE.) To check a channel's status, use the **Communications Status** option, as discussed in [Section 4.2](#).

For an email channel, the ON state indicates that the channel can *receive* messages. To direct an email channel to *transmit* messages, you must activate transmission for each of the channel's domains, as described in [Section 3.3](#). Conversely, the OFF state for an email channel indicates that the channel cannot *receive* messages. To direct an email channel to *stop transmitting* messages, you must deactivate transmission for each of the channel's domains, as described in [Section 3.3](#).

**XMIT-ONLY**

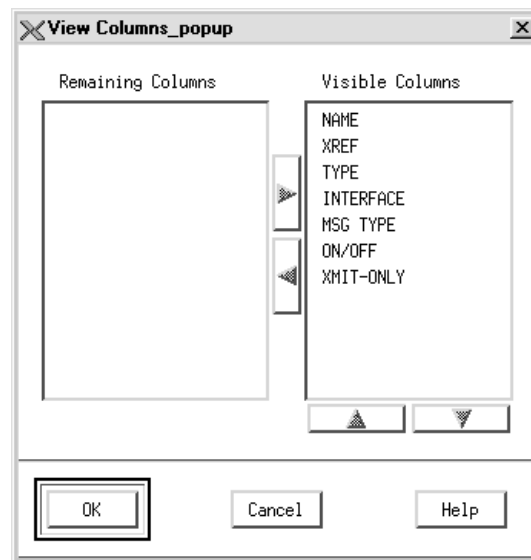
Indicates the status of the transmit-only mode; either ON, OFF, or N/A (not applicable for the email interface).

## To modify the column layout

In the Communications Manager, you may change the order in which columns appear and hide columns.

1. In the Communications Manager, select View > Columns. The View Columns window appears.

*Figure 4.1-2 View Columns Window*



2. To change the order in which columns appear: In the Visible Columns box, select the column to move and then click the up or down arrow beneath the box to move the column to its new position.
3. To hide a column: In the Visible Columns box, select the column to hide and then click the left arrow to move the column to the Remaining Columns box, which lists each column that is hidden.

When you close the Communications Manager, the changes to the column layout you made are cleared; thus, all of the column headings appear in their default order when the window is reopened.

## To manage channels

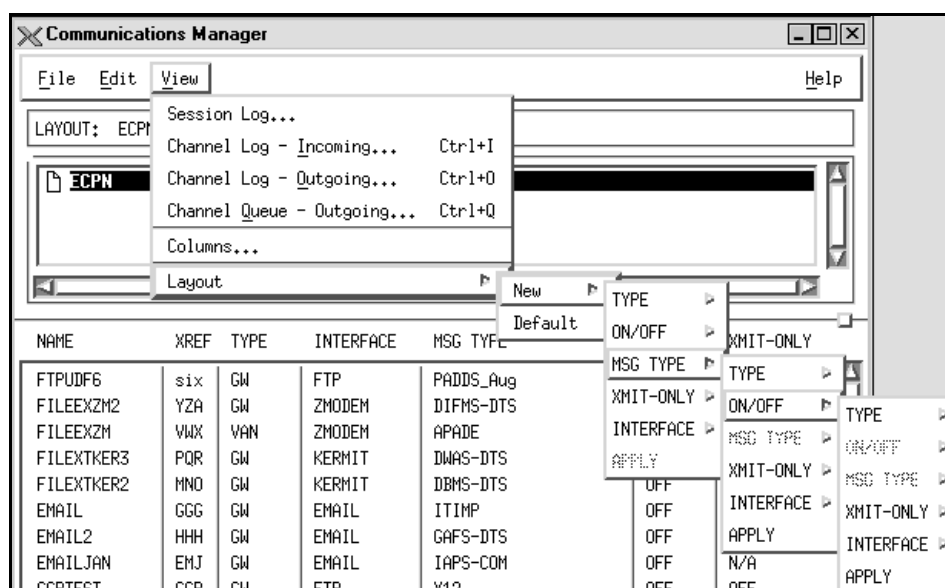
The Communications Manager enables you to group channel information into a hierarchy of folders, view the channels that match each folder's criteria, and perform a variety of tasks with those channels.

For example: If DMC-Ogden assumes communications for DMC-Columbus during a Continuity of Operations (COOP), DMC-Ogden could use the folder hierarchy to display all of the SAACONS channels and start them. When DMC-Columbus returns online, DMC-Ogden could again use the folder hierarchy to display all of the SAACONS channels and set them to transmit-only mode.

1. To set up a folder hierarchy: In the Communications Manager, select View > Layout > New. The New submenu displays a list of five of the column headings from the Communications Manager: TYPE, ON/OFF, MSG TYPE, XMIT-ONLY, and INTERFACE. Select the column heading to be the top-level folder, and then continue to select column headings from the submenus until you have set up the folder hierarchy. When you have finished adding fields, open another submenu and select APPLY. The LAYOUT box displays the hierarchy of the selected fields.

Figure 4.1-3 illustrates how to set up a folder hierarchy. Using this figure as an example, the top-level folder is message types and the next level folder is on or off settings for channels.

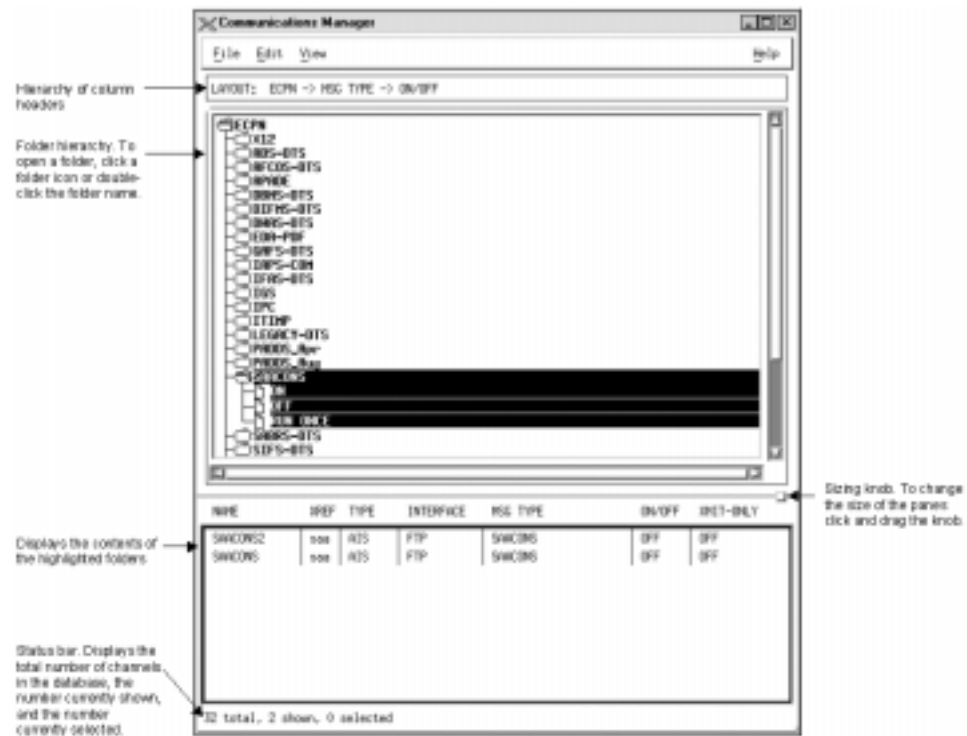
Figure 4.1-3 Folder Hierarchy Setup



2. To view the channels that match each folder's criteria: In the top pane of the **Communications Manager**, click the folder icon once or double-click the folder name to open the folder. Continue this process to open each level of folders. When a folder is highlighted, each channel that matches its criteria (such as message type) is displayed in the bottom pane of the **Communications Manager**. To highlight more than one folder, press [Shift] and then select another folder.

Figure 4.1-4 illustrates how to use the folder hierarchy to view selected channels. Using this figure as an example, if you wish to view all of the SAACONS channels, select SAACONS. The bottom pane displays all of the SAACONS channels. To view all of the SAACONS channels that are off, deselect ON. The bottom pane displays only the SAACONS channels that are off.

Figure 4.1-4 Folder Hierarchy



3. To perform tasks with channels: In the bottom pane, select the channels and then select an option from one of the pull-down menus. For example, you may start or stop channels, activate or deactivate transmit-only mode for channels, or delete channels.
4. To return to the default channel layout: Select **View > Layout > Default**.

When you close the **Communications Manager**, the folder hierarchy you set up is cleared.

### **To start one or more channels**

In the Communications Manager, select each inactive channel and then select **File > Channel On**. The channel initiates a communications session and then initiates further communications sessions according to the frequency specified in the [communications scheduler](#).

### **To stop one or more channels**

In the Communications Manager, select each active channel and then select **File > Channel Off**. The channel stops and terminates any active communications sessions.

### **To view a session log for a channel**

For each communication session, the communication process writes status information to a session log. Session logs provide helpful information in performing diagnostics, such as a list of messages (including any associated MSNs and ICNs) transmitted during a communications session.

Each session log contains information for the current day. (To view session logs created prior to the current day, in addition to logs for the current day, use the **Process Logs** option, discussed in [Section 7.1](#).) Session logs provide a dynamic view of communication sessions because they are automatically updated as information changes. A new log is created for each *active* channel at midnight (ZULU time). If a channel is *inactive*, no session log will be created.

---

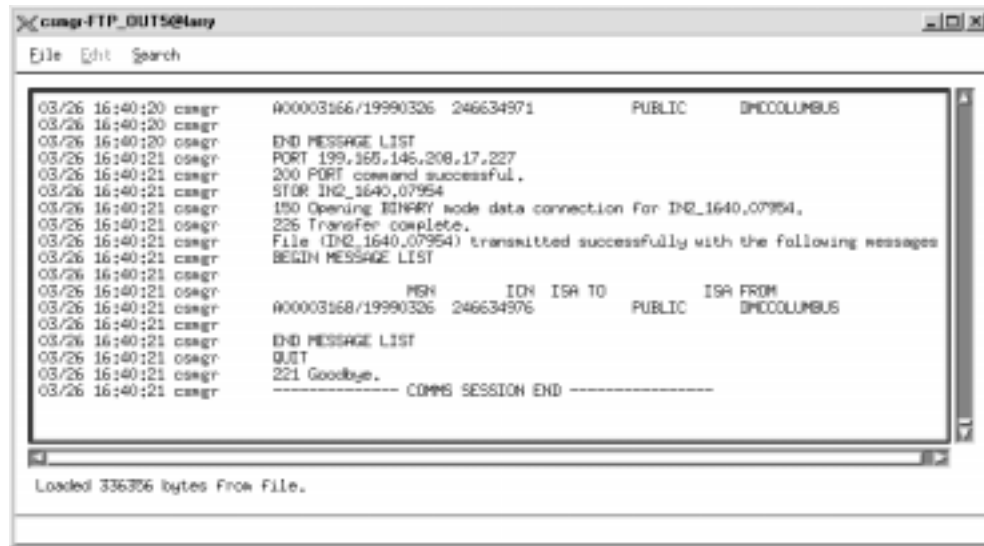
**NOTE:** Session logs are not created on a per-channel basis for the email interface. To view status information for incoming and outgoing email transactions, use the **Process Logs** option (discussed in [Section 7.1](#)).

---



1. In the Communications Manager, select a channel and then select View > Session Log. The session log window for the selected channel appears, displaying in the title bar the log name, channel name, and host name.

Figure 4.1-5 Session Log Window



This window displays the contents of the channel's session log as changes occur. To view a listing of events from a previous day, use the **Process Logs** option (discussed in [Section 7.1](#)).

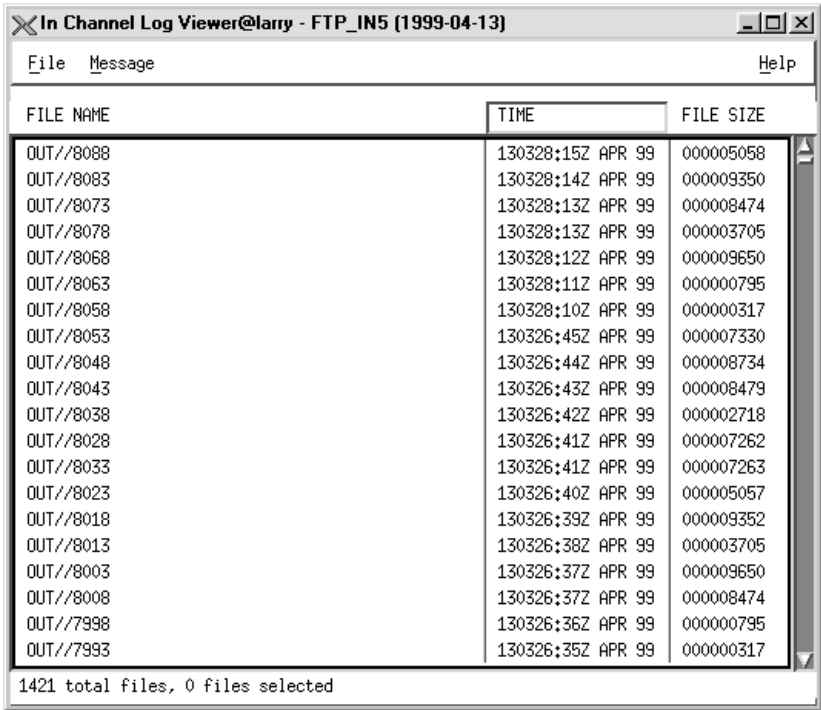
2. When the session log window initially appears, it displays the most recent event at the bottom of the window. To view earlier events for the day, scroll up. If activity occurs on the channel, the window scrolls down automatically as it displays the flow of data.
  - a. To pause the flow of data in the window, select **File > Pause**. The scrolling process pauses.
  - b. To resume the flow of data, select **File > Resume**. The flow of data resumes.

## To view the incoming channel log for a channel

The incoming channel log enables you to track the files received by a channel according to the date of receipt. Each incoming channel log contains the incoming files received by a specific channel for a certain day. A new log is created for each *active* channel at midnight (ZULU time). If a channel is *inactive* at that time, no incoming channel log is created.

1. In the Communications Manager, select the channel and then select View > Channel Log - Incoming. The In Channel Log Viewer appears.

Figure 4.1-6 In Channel Log Viewer



The screenshot shows a window titled "In Channel Log Viewer@larry - FTP\_IN5 (1999-04-13)". It has a menu bar with "File", "Message", and "Help". Below the menu bar is a table with three columns: "FILE NAME", "TIME", and "FILE SIZE". The table contains 20 rows of data. At the bottom of the window, it says "1421 total files, 0 files selected".

FILE NAME	TIME	FILE SIZE
OUT//8088	130328:15Z APR 99	000005058
OUT//8083	130328:14Z APR 99	000009350
OUT//8073	130328:13Z APR 99	000008474
OUT//8078	130328:13Z APR 99	000003705
OUT//8068	130328:12Z APR 99	000009650
OUT//8063	130328:11Z APR 99	000000795
OUT//8058	130328:10Z APR 99	000000317
OUT//8053	130326:45Z APR 99	000007330
OUT//8048	130326:44Z APR 99	000008734
OUT//8043	130326:43Z APR 99	000008479
OUT//8038	130326:42Z APR 99	000002718
OUT//8028	130326:41Z APR 99	000007262
OUT//8033	130326:41Z APR 99	000007263
OUT//8023	130326:40Z APR 99	000005057
OUT//8018	130326:39Z APR 99	000009352
OUT//8013	130326:38Z APR 99	000003705
OUT//8003	130326:37Z APR 99	000009650
OUT//8008	130326:37Z APR 99	000008474
OUT//7998	130326:36Z APR 99	000000795
OUT//7993	130326:35Z APR 99	000000317

This window displays an entry under the following column headings for each incoming file:

### FILE NAME

Path location and name of the incoming file as received by ECPN. For email channels, a message identifier appears in this field. The format of this identifier varies depending on who sent the message; however, it usually contains such information as the date and time the message was sent and the sender's domain.

**TIME**

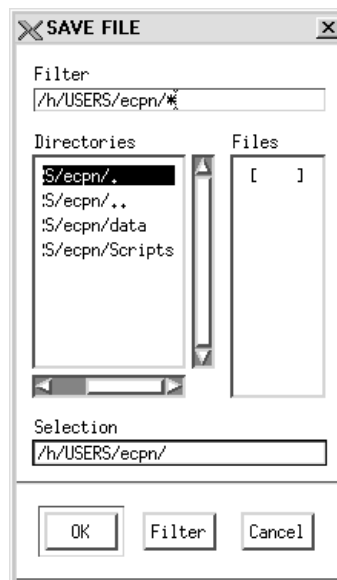
Time of file receipt.

**FILE SIZE**

Size of the file in bytes.

2. To save a file in the incoming channel log as a text file to another location, select the file and then select **File > Save As**. The **SAVE FILE** window appears.

*Figure 4.1-7 SAVE FILE Window*



- a. In the **Filter** field, enter the destination path and file name. If you do not know the path, browse by selecting a directory in the **Directories** box and then clicking **Filter**. Repeat this process until the path appears in the **Filter** field.
- b. To save the file to the specified path, click **OK**. The file is saved as a text file.

- To view the contents of an incoming file, double-click the file, or click it once and then select **Message > View**. The Channel File Viewer appears.

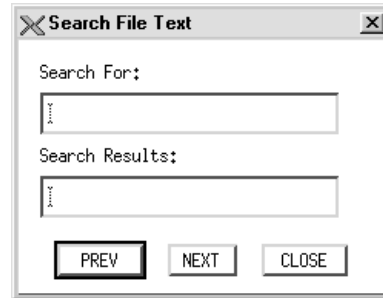
Figure 4.1-8 Channel File Viewer



This window displays the contents of the file as received by ECPN. For email channels, the email address header is also included. Special characters that are unprintable are represented by hexadecimal values enclosed in angle brackets (e.g., <0d>). The file contents wrap from line to line in the viewer. Use scroll bars to navigate the file.

4. To search the contents of *all* of the files in the incoming channel log for a text string, select **Message > Search File Text**; or, to search the contents of the files starting with a specific file in the log, select the file and then select **Message > Search File Text**. The **Search File Text** window appears.

Figure 4.1-9 Search File Text Window



This window functions in the same basic manner as the **Search** window described in [To search for data](#) in [Section 1.3](#).

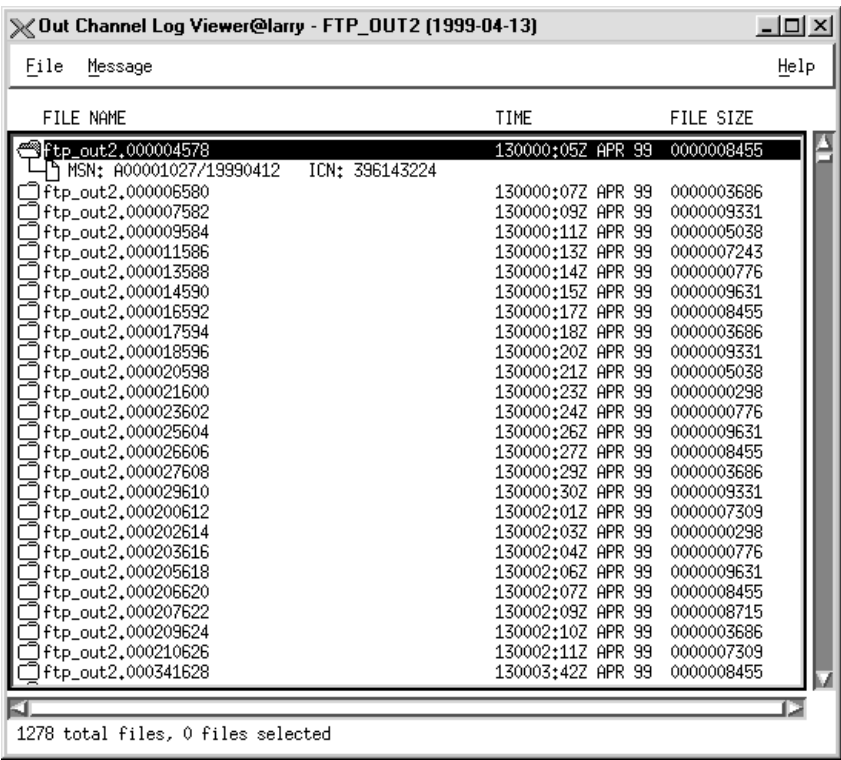
The files in the log are searched sequentially for the string in the **Search For** field, and the **Search Results** field displays the status of the search. If a match is found, the **Channel File Viewer** ([Figure 4.1-8](#)) appears, with the search string highlighted in the contents of the file.

To view the outgoing channel log for a channel

The outgoing channel log enables you to track the files and individual messages transmitted by each channel according to the date of transmission. Each outgoing channel log contains the outgoing files transmitted by a specific channel for a certain day. A new log is created for each *active* channel at midnight (ZULU time). If a channel is *inactive* at that time, no outgoing channel log is created.

- 1. In the Communications Manager, select the channel and then select View > Channel Log - Outgoing. The Out Channel Log Viewer appears.

Figure 4.1-10 Out Channel Log Viewer



This window displays an entry under the following column headings for each outgoing file:

FILE NAME

Path location and name of the outgoing file as transmitted by ECPN. For email channels, a message identifier appears in this field. Typically, the message identifier for outgoing email begins with ECPN, followed by the date and time when the message was sent, an alphanumeric process ID assigned by the system, and the sender's domain name (e.g., ECPN.980407123005.12345A@acme.com).

**TIME**

Time of file transmission.

**FILE SIZE**

Size of the file in bytes.

2. To view the messages contained in a file, click the file name. The MSN for each of the transmitted messages appears under the file name.
3. To view the Journal Data Summary (JDS) for a message, double-click the MSN. The JDS Viewer ([Figure 3.1-4](#)) appears. For a description of this window, see *To view the JDS for a message* in [Section 3.1](#).
4. To save a file in the outgoing channel log as a text file to another location, select the file and then select **File > Save As**. The **SAVE FILE** window ([Figure 4.1-7](#)) appears. For instructions on saving a file, see [Step 2](#) in *To view the incoming channel log for a channel*.
5. To retransmit one or more files, select each file and then select **File > Retransmit**. Each file is queued for transmittal. Each file will be retransmitted in its original form unless changes were made to the channel configuration (discussed in [Section 4.1.1](#) to [4.1.11](#)) since its original transmission. For email channels, the file content is retransmitted *only* to the subaddress list of the original file.

Once a file is retransmitted, the JDS Viewer ([Figure 3.1-4](#)) for the file displays **RETRANSMIT** in the Reason field of the corresponding Action Summary statement.

- To view the contents of an outgoing file, select the file and then select Message > View. The Channel File Viewer appears.

Figure 4.1-11 Channel File Viewer



This window is divided into two panes. The upper pane lists the MSN of each transmitted message and the offset (line number) of each MSN in the file. (To view the JDS for a message, double-click the MSN. The JDS Viewer appears. For a description of this window, see *To view the JDS for a message* in [Section 3.1](#).) For each MSN, the transmitted GS and ST segments are also listed. For example, an entry of GS: 2, ST: 1 indicates that the first ST segment of the second GS segment in the associated MSN was transmitted. If all of the GS and ST segments are transmitted for an MSN, then ALL appears in the GS and ST fields.

For outgoing email channel logs, the upper pane also contains a listing (under the SUBADDR heading) of each email address to which the displayed file was sent. For email channels, the system transmits a file to each domain in the *send to* list for the channel (described in [Section 4.1.7](#)). (The domain appears after the @ symbol in the email address.) If the *send to* list contains two different domains, then two separate files with identical content are transmitted to each domain.



Suppose, for example, that the *send to* list of a channel contains the following addresses: julie@def.com, chris@def.com, tracy@tmc.com. ECPN sends one copy of each outgoing file for this channel to Julie and Chris at def.com and another copy to Tracy at tmc.com. The Out Channel Log Viewer displays two records, one for each file transmitted. To distinguish which copy of the file is currently displayed, check the SUBADDR field in the Channel File Viewer.

The bottom pane of the Channel File Viewer contains the File Content box. This box displays the text of the file *exactly* as it was transmitted, including any conversions specified for a channel, such as outgoing ISA sender ID and qualifier conversion or segment terminator replacement. Special characters that are unprintable are represented by hexadecimal values enclosed in angle brackets (e.g., <0d>). The file contents wrap from line to line in the viewer. Use scroll bars to navigate the file.

7. To search the columns in the outgoing channel log for a text string, select **Message > Search Log Summary**. The Search Log Summary window appears. This window functions in the same basic manner as the Search window described in [To search for data](#) in [Section 1.3](#).
8. To search the contents of *all* of the files in the outgoing channel log for a text string, select **Message > Search File Text**; or, to search the contents of the files starting with a specific file in the log, select the file and then select **Message > Search File Text**. The Search File Text window ([Figure 4.1-9](#)) appears. This window functions in the same basic manner as the Search window described in [To search for data](#) in [Section 1.3](#).

To view the outgoing message queue for a non-email channel

The Out Channel Queue Viewer enables you to view a queue of outgoing messages pending transmission by a non-email channel. After transmission, the messages are removed from the queue. You can view the exact text of a transmitted message using the Out Channel Log Viewer (Figure 4.1-10).

- 1. In the Communications Manager, select a non-email channel and then select View > Channel Queue - Outgoing. The Out Channel Queue Viewer appears, displaying the channel name in the title bar.

Figure 4.1-12 Out Channel Queue Viewer

Out Channel Queue Viewer@larry - FTP_OUT3		
File Message		Help
MSN	QUEUE TIME	TEMP UDF FILE NAME
A00003704/19990303	030150:09Z MAR 99	
A00003709/19990303	030150:10Z MAR 99	
A00003723/19990303	030150:14Z MAR 99	
A00003725/19990303	030150:14Z MAR 99	
A00003729/19990303	030150:15Z MAR 99	
A00003748/19990303	030150:20Z MAR 99	
A00003749/19990303	030150:20Z MAR 99	
A00003757/19990303	030150:22Z MAR 99	
Records: 8 Selected: 0		

This window displays an entry under the following column headings for each outgoing message:

**MSN**

Message sequence number assigned to an incoming decoded message in the order of receipt. The MSN has the format SNNNNNNNN/YYYYMMDD (explained in Table 1.1-2).

**QUEUE TIME**

Time (ZULU) the message was placed in the outgoing channel queue.

**TEMP UDF FILE NAME**

(UDF channels only) Name of the temporary UDF file generated during translation. For X12 channels, this field is blank.

2. To access the **Raw Viewer** for an outgoing message, select the message and then select **Message > Raw Message**. The **Raw Viewer** ([Figure 3.1-3](#)) appears. For information on the **Raw Viewer**, see *To view a raw message* in [Section 3.1](#).
3. To view the **Journal Data Summary (JDS)** for an outgoing message, double-click the message, or click it once and then select **Message > Formatted Message**. The **JDS Viewer** ([Figure 3.1-4](#)) appears. For instructions on navigating the **JDS Viewer**, see *To view the JDS for a message* in [Section 3.1](#).
4. You can delete a message from the outgoing channel queue in one of two ways:
  - a. To delete a message from the outgoing channel queue before transmittal, select the message and then select **Message > Delete Record**.
  - b. To delete a message from the outgoing channel queue before transmittal *and* place it in the error queue, select the message and then select **Message > Delete Record to Error Queue**. For a description of the error queue, see [Section 3.2](#).

You *cannot* delete a message while a channel is on. If you try to delete a message while a channel is on, a warning window notifies you that you must stop the channel (as described in *To stop one or more channels*) before selecting one of the delete options.

Deleting a message can be reversed — in other words, you can send a message back to the outgoing channel queue once it has been deleted. To do so, reroute the message from either the message log (as described in [Section 3.1](#)) or the error queue (as described in [Section 3.2](#)).

**To view the outgoing message queue for all email channels**

In the **Communications Manager**, select any email channel and then select **View > Channel Queue - Outgoing**. The **Outgoing Email Queues** window ([Figure 3.3-1](#)) appears. Unlike outgoing *non-email* messages, which are grouped by channel in the outgoing channel queues, outgoing *email* messages are grouped by remote host (domain). To view each message queued to a domain, double-click the domain name. For a description of the **Outgoing Email Queues** window, see [Section 3.3](#).

### **To activate transmit-only mode for one or more channels**

Activating transmit-only mode configures the selected channel to transmit messages but not receive them. Note that you cannot activate transmit-only mode for an email channel. The primary reason to activate transmit-only mode is to delete queued messages after a COOP. For example: If DMC-Ogden assumes communications for DMC-Columbus, DMC-Ogden should activate all of its Columbus channels in the communications channel database and all of its Columbus routes in the routing database. When DMC-Columbus returns online, DMC-Ogden should configure all of the Columbus channels to transmit only, which causes these channels to transmit all queued messages but not receive any new messages. Once the queues have cleared, DMC-Ogden should deactivate all channels and routes that it assumed from DMC-Columbus.

In the Communications Manager, select each non-email channel and then select **Edit > Set Xmit-Only**. In the XMIT-ONLY column, the status of each channel changes to ON.

### **To deactivate transmit-only mode for one or more channels**

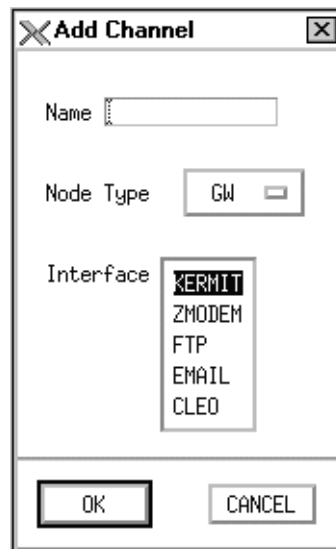
For the CLEO, Kermit, and ZMODEM interfaces, deactivating transmit-only mode configures the selected channel to transmit and receive messages. For the FTP interface, deactivating transmit-only mode reestablishes the connection protocol (push or push/pull) currently configured for the channel in the **Edit FTP** window ([Figure 4.1-26](#)).

In the Communications Manager, select each channel and then select **Edit > Unset Xmit-Only**. In the XMIT-ONLY column, the status of each channel changes to OFF.

## To add a channel

1. In the Communications Manager, select Edit > Add. The Add Channel window appears.

Figure 4.1-13 Add Channel Window



2. In the Name field, enter a name for the channel. The name is restricted to alphanumeric, underline (\_), and hyphen (-) characters.
3. In the Node Type field, click the list box to display a list of valid node types. Select an entry from the list as follows:
  - GW – Gateway
  - VAN – Value Added Network
  - AIS – Automated Information System
  - CCR – Centralized Contractor Registration

4. In the **Interface** list, select the type of interface that the channel will use. Available interface types and their functions are described in [Table 4.1-2](#).

*Table 4.1-2 Communications Interface Types*

<b>Interface</b>	<b>Function</b>
KERMIT	Uses the Kermit protocol to establish serial connections over a dial-up modem.
ZMODEM	Uses the ZMODEM protocol to establish serial connections over a dial-up modem.
FTP	Uses the standard file transfer protocol.
EMAIL	Uses the email protocol.
CLEO	Uses the CLEO protocol to establish serial connections over a dial-up modem.

5. To accept the new channel, click **OK**.
6. When a new channel is created, default settings are used for the channel configuration. To ensure that the new channel is configured with the proper settings, view and edit the settings as described [later](#) in this section.

### **To delete a channel**

1. In the **Communications Manager**, select each channel and then select **Edit > Delete**. (Note that you can delete an inactive channel only.) A warning window appears, asking for confirmation of the deletion.
2. To delete each channel, click **OK**; or click **Cancel** to stop the deletion and return to the **Communications Manager**.

## To edit a channel

In the Communications Manager, select the channel to edit and then select **Edit > Edit**. The edit channel window for the selected channel appears. This window enables you to view and edit groups of settings for the channel using a series of tabs at the top of the window. Some of the tabs are common to all channel types, and some are channel-specific. Refer to [Table 4.1-3](#) to determine which tab to select, based on the settings that you wish to view or edit.

*Table 4.1-3 Overview of Settings in the Edit Channel Window*

To view or edit	Select	Then refer to
General channel settings	GENERAL	<a href="#">Section 4.1.1</a>
The translation map for UDF messages	TRANSLATION	<a href="#">Section 4.1.2</a>
Settings for traffic summary reports and 997 and 824 acknowledgements	ADMIN	<a href="#">Section 4.1.3</a>
Character conversion preferences for outgoing messages	CONVERSION	<a href="#">Section 4.1.4</a>
Point-of-contact information and channel notes	NOTES	<a href="#">Section 4.1.5</a>
CLEO channel settings	CLEO	<a href="#">Section 4.1.6</a>
Email channel settings	EMAIL	<a href="#">Section 4.1.7</a>
Login information for remote FTP connection	FTP	<a href="#">Section 4.1.8</a> , <a href="#">To view and edit FTP remote login information</a>
FTP transfer parameters	FTP TRANSFER	<a href="#">Section 4.1.8</a> , <a href="#">To view and edit FTP transfer parameters</a>
Kermit channel settings	KERMIT	<a href="#">Section 4.1.9</a>
ZMODEM channel settings	ZMODEM	<a href="#">Section 4.1.10</a>
Command file for a CLEO, Kermit, or ZMODEM channel	SCRIPT button	<a href="#">Section 4.1.11</a>

### 4.1.1 General Channel Settings

The **GENERAL** tab in the edit channel window enables you to verify the channel name, node, and interface; specify connection times for communications sessions; define a channel cross-reference; and specify routing checks and alert functions for outgoing communications.

1. In the edit channel window, click the **GENERAL** tab.

*Figure 4.1-14 Edit Channel Window: GENERAL Tab*



2. In the **NAME** field, verify the unique channel name.
3. In the **NODE TYPE** field, verify the type of node (GW, VAN, AIS, or CCR).
4. In the **INTERFACE** field, verify the type of interface (KERMIT, ZMODEM, FTP, EMAIL, or CLEO).
5. (FTP, Kermit, ZMODEM only) The **NEXT COUNTER** field displays the next available counter number for this channel. You may enter a variable to form a numbering string within a file name (as discussed in [Section 4.1.8, Step 6](#) for FTP; [Section 4.1.9, Step 4](#) for Kermit; and [Section 4.1.10, Step 4](#) for ZMODEM).
6. In the **XREF** field, enter a one- to three-character communications cross-reference code for the channel. For FTP, Kermit, or ZMODEM channels, the system adds the value entered in the **XREF** field to the file name when the source {sxrf} or destination {drxf} variable is specified as part of the file name (as discussed in [Section 4.1.8, Step 6](#) for FTP; [Section 4.1.9, Step 4](#) for Kermit; and [Section 4.1.10, Step 4](#) for ZMODEM).



7. Select or clear the **CHECK REPLY ROUTE AVAILABLE** check box to indicate whether the system should verify that a message recipient can send a reply message to the message's originator *before* transmitting an outgoing message from this channel.
  - If this box is selected, the system checks the routing database before sending an outgoing message from this channel to ensure that it contains a routing entry for the message originator (from the GS02 [Application Sender's Code] field). For more information on the routing database, see [Section 5.1](#).

If no reply route is available, a **NO X12 REPLY ENTRY** alert is generated, and the outgoing message is placed in the error queue. For instructions on how to correct this error and reroute the message, see [Appendix B](#).
  - If this box is cleared, the system transmits the outgoing message without verifying that the message recipient will be able to reply to the message originator. No alert is generated for the outgoing message. Note, however, that if the message recipient's system automatically generates reply messages and no reply route is available, the incoming reply message will be rejected by ECPN and either placed in the error queue (discussed in [Section 3.2](#)) or the rejected email mailbox (discussed in [Section 3.4](#)).
8. (For all interfaces except email) The **CONNECT OPTIONS** box ([Figure 4.1-15](#)) contains options for the communications scheduler, which enables you to schedule the frequency and time of a channel's communications sessions and to specify how to handle failed connections. The period of time in which a channel is connected to a remote site for data transfers is called a *communications session*. For information on setting the options in the scheduler, see [Figure 4.1-15](#).

Figure 4.1-15 Communications Scheduler

The screenshot shows a 'CONNECT OPTIONS' dialog box. It contains two rows of settings. The first row is 'Connect every' followed by a text box containing '10', a dropdown menu showing 'MINUTE(S)', 'between' followed by two time text boxes containing '00:00' and '21:00', and 'every' followed by a dropdown menu showing 'DAY'. The second row is 'Retry failed connections' followed by a text box containing '5', 'times at' followed by a text box containing '1', a dropdown menu showing 'MINUTE(S)', and 'intervals'. Labels A through H point to these fields: A points to the '10' text box; B points to the 'MINUTE(S)' dropdown; C points to the '00:00' time box; D points to the '21:00' time box; E points to the 'DAY' dropdown; F points to the '5' text box; G points to the '1' text box; and H points to the 'MINUTE(S)' dropdown.

**A** – Enter the length of time to wait after one communications session has finished before initiating another communications session.

**B** – Specify the measure of the time entered in Step A by clicking the list box and then selecting either HOUR(S), MINUTE(S), or SECOND(S).

**C** – Enter the time of day at which to start communications sessions.

**D** – Enter the time of day at which to disable communications sessions. If an active session is running at this time, it finishes transferring data.

**E** – Specify how frequently to enable communications sessions by clicking the list box and then selecting either every DAY or every WEEKDAY.

**F** – Enter the number of times that the channel should retry a failed connection to the remote site before generating an alert.

**G** – Enter the frequency at which to retry a failed connection.

**H** – Specify the measure of the time entered in Step G by clicking the list box and then selecting either HOUR(S), MINUTE(S), or SECOND(S).

To illustrate how the communications scheduler works: Suppose you direct a channel to connect every 10 minutes between 00:00 and 21:00 every day and to retry failed connections five times at 1 minute intervals. Between midnight and 9 p.m. each day of the week, the channel initiates communications sessions with the remote site, waiting 10 minutes after one session ends before reconnecting for another session. If the channel cannot connect to the remote site, it tries to connect five times, waiting 1 minute between each attempt. If the channel cannot connect to the remote site after 5 attempts, an alert is generated. The channel continues to try to connect, generating an alert every fifth time it fails. For FTP channels, an **FTP UNAVAILABLE** alert is generated, and for ZMODEM, Kermit, and CLEO channels, a **DIAL FAILED** alert is generated.

To bypass the communications scheduler, use the **RUN ONCE** option.

9. To save your changes, click **OK**. The changes will go into effect when the next communications session is initiated.

## 4.1.2 Translation Mapping for UDF Messages

The TRANSLATION tab in the edit channel window enables you to do the following:

- Select the [message type](#) to be processed by the channel (either X12 or a UDF format)
- View or edit the [look-up table](#) for a UDF format
- View [related documents](#) for a UDF format

Figure 4.1-16 Edit Channel Window: TRANSLATION Tab

Edit FTP: FTP HOST: achain

GENERAL TRANSLATION FTP FTP TRANSFER ADMIN CONVERSION NOTES

MESSAGE TYPE ... SARCNS

DESCRIPTION

NAME: SARCNS — Standard Army Automated Contracting System

SYNOPSIS

Transaction Type	UDF-X12	X12-UDF
824 Application Advice	X	X
836 Contract Award	X	
840 Request For Quotation	X	
843 Response to Request For Quotation		X
850 Purchase Order	X	
860 Purchase Order Change	X	

DESCRIPTION

These maps support outbound (UDF-X12) 824, 836, 840, 850 and 860 transactions, and inbound (X12-UDF) 824 and 843 transactions based on the 3010 Rework Implementation Convention and the corresponding SARCNS UDF.

SUPPORT TABLES AND DOCUMENTATION

LOOK-UP TABLES ..... sacnsd.tbl

EDIT TABLE

VIEW DOCUMENTS

OK CANCEL

## To select a message type

Each UDF message type belongs to a map family, which is a collection of processing instructions (called map files) for converting data. When a channel is created, the message type defaults to X12. A map family generally contains a number of map files, as described in [Table 4.1-4](#).

*Table 4.1-4 Translation Map Files*

Name	Function
premap file	Separates each component of a UDF message so that only one transaction is sent through a map at a time.
UDF→X12 map file	Converts an incoming UDF message to X12.
X12→UDF map file	Converts an outgoing X12 message to UDF.
824 map file	Generates the 824 acknowledgement transaction upon translation of a UDF to X12.
997 map file	Generates the 997 acknowledgement transaction upon translation of an X12 to UDF.

1. In the edit channel window, click the **TRANSLATION** tab.
2. In the **MESSAGE TYPE** field, click the list box to display a list of valid message types that may be processed by the channel. Select an entry from the list: either X12 or one of the UDF formats (e.g., SAACONS, IGS, SPS).
  - a. If you select X12 as the message type, the **DESCRIPTION** box remains blank because no map file is necessary to process incoming or outgoing X12 messages.

- b. If you select a specific UDF format as the message type, the map description file for the UDF appears in the **DESCRIPTION** box. In addition, all of the options on the **CONVERSION** tab, discussed in [Section 4.1.4](#), except for **FIXED LENGTH RECORDS** are disabled. Read the map description file to ensure that you have selected the appropriate UDF format for the channel. The map description file contains the following information, as described in [Table 4.1-5](#).

*Table 4.1-5 Map Description File Contents*

Field name	Explanation
NAME	Name of the map family (e.g., <b>SAACONS</b> – Standard Army Automated Contracting System).
SYNOPSIS	A short description of the map.
DESCRIPTION	Summary of the transaction sets supported, the handling of acknowledgments (e.g., an 824 is generated), and the names of sites or systems that use the map.
ADDRESSING	Description of the way addresses are translated between systems (e.g., X12 envelopes, ICN/GCN management). Hardcoded addresses are included, when applicable.

3. To save your changes, click **OK**. The changes will go into effect when the next communications session is initiated.

### To view or edit the look-up tables for a UDF format

Most of the data that ECPN requires for translating incoming and outgoing UDF messages is stored in the following locations:

- System setup database (described in [Section 2.1](#))
- Trading partner database (described in [Section 5.2](#))
- Translation map description files (contain pointers to the specific map files that are applicable for the UDF format; stored in `/h/data/global/EC/Messages/MessageDesc`)
- Map files for each map family (stored in `/h/data/global/EC/Messages/Maps/<Map Family>`)

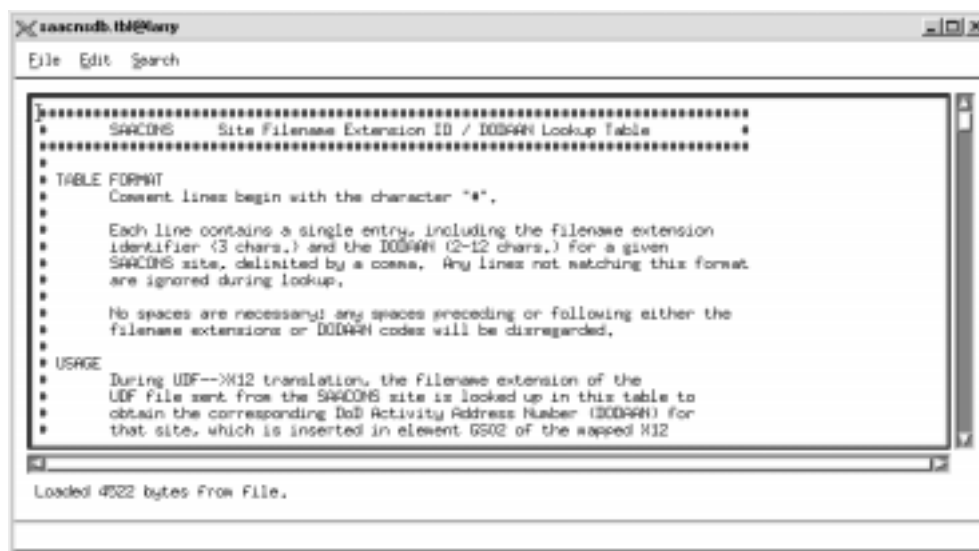
However, some UDF formats (e.g., **SAACONS**) require specialized codes for addressing purposes. For each of these formats, a look-up table is used to ensure proper addressing for incoming and outgoing messages that require translation. This look-up table contains information not stored elsewhere in ECPN.

For example, when translating an incoming or outgoing SAACONS UDF message, ECPN uses the Site Filename Extension ID/DODAAC Look-up Table to match the file name extension with a corresponding Department of Defense Activity Address Code (DODAAC). During UDF→X12 translation, ECPN compares the incoming UDF's file name extension to the entries in the look-up table and obtains the corresponding DODAAC number, which is then inserted in the GS02 (Application Sender Code) field. For X12→UDF translation, ECPN compares the intended recipient's DODAAC to the entries in the look-up table and obtains the appropriate file name extension for the outgoing UDF.

To view or edit a look-up table:

1. In the edit channel window, click the **TRANSLATION** tab.
2. Ensure that the correct UDF format is displayed in the **MESSAGE TYPE** field.
3. In the **SUPPORT TABLES AND DOCUMENTATION** box, click the **LOOK-UP TABLES** list box, and select a look-up table to view. Note that you may view or edit only one table at a time, and the list box displays – **NONE** – if no look-up tables are available for the selected message type.
4. Click **EDIT TABLE**. The look-up table file appears, displaying the table name and the host name in the title bar of the window.

*Figure 4.1-17 Translation Look-up Table*



5. Edit the table as necessary.
6. To save your changes, click **OK** in the edit channel window. The changes will go into effect when the next communications session is initiated.

## To view related documents for a UDF format

---

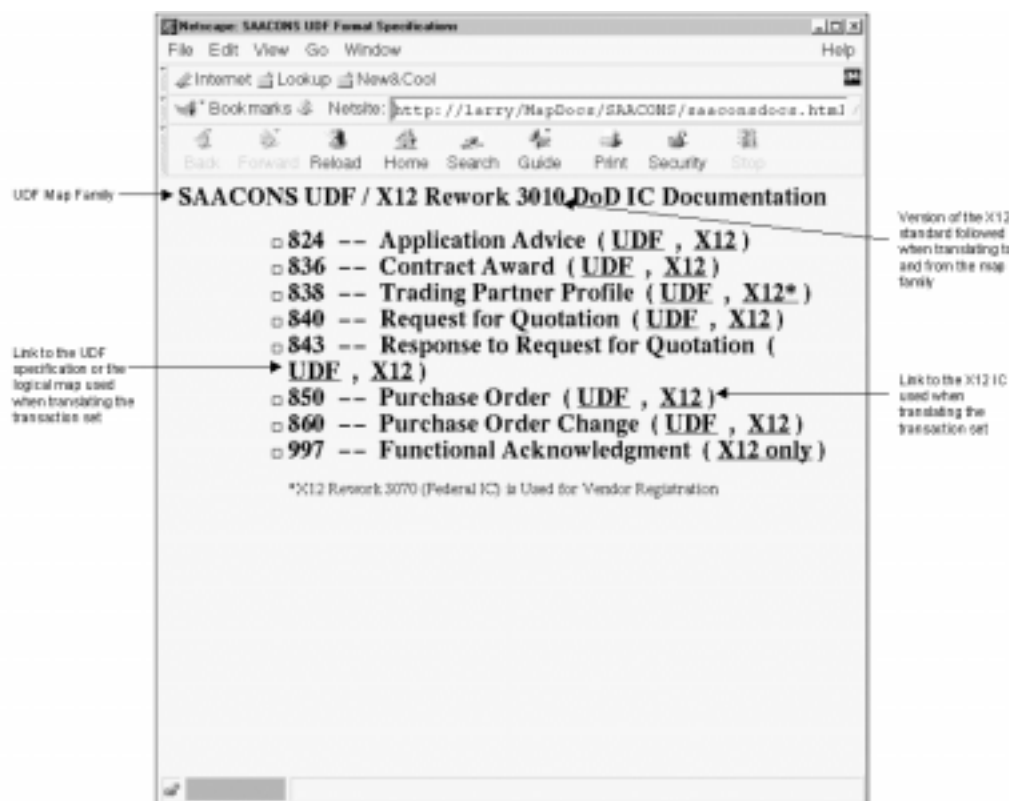
**NOTE:** The Netscape Enterprise Server™, Netscape Navigator®, and Acrobat® Reader segments must be installed in order to use this feature. For more information on installing a segment, see the *System Administrator's Guide for Electronic Commerce Processing Node*.

---

From the TRANSLATION tab, you can view the various standards documents used as references when developing the translation maps for a selected UDF format. The available documents ([Figure 4.1-18](#)) include the following:

- X12 Implementation Conventions
  - UDF Specifications (if available)
  - Logical Maps
1. In the edit channel window, click the TRANSLATION tab.
  2. In the MESSAGE TYPE field, ensure that the correct UDF format appears.
  3. In the SUPPORT TABLES AND DOCUMENTATION box, click VIEW DOCUMENTS. Netscape Navigator opens, displaying a list of the X12 transaction sets that can be translated for the selected UDF format. This list includes links to related standards documents. These documents are in Portable Document Format (PDF) and are stored on the system.

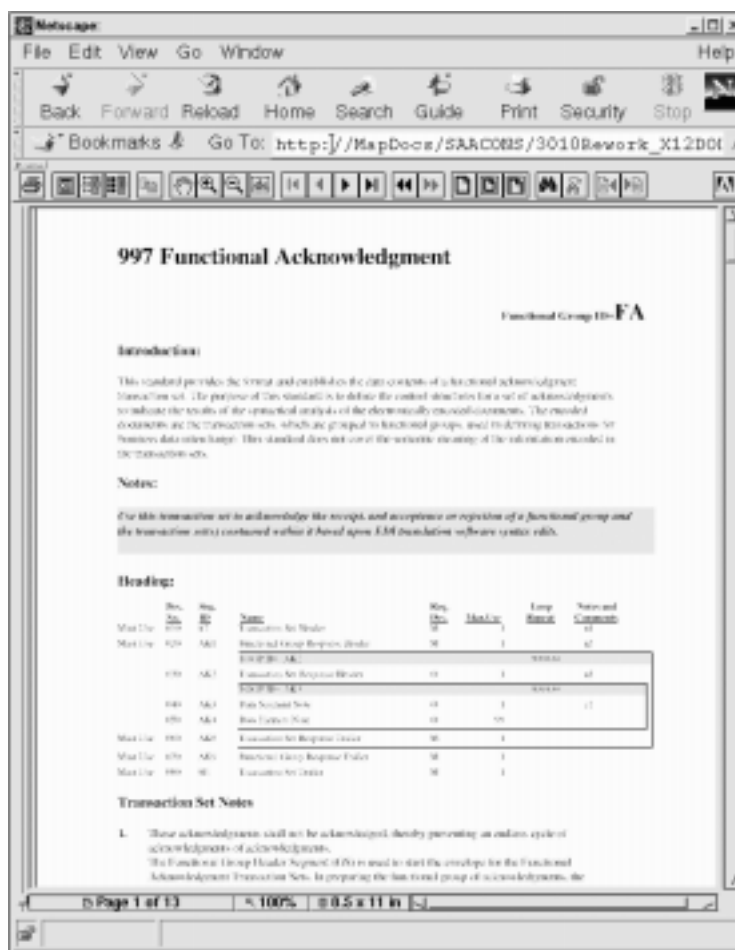
Figure 4.1-18 List of Format Specifications for a Selected UDF



4. To view a document, click its link. Acrobat Reader opens, displaying the selected document.



Figure 4.1-19 Specifications Document in PDF

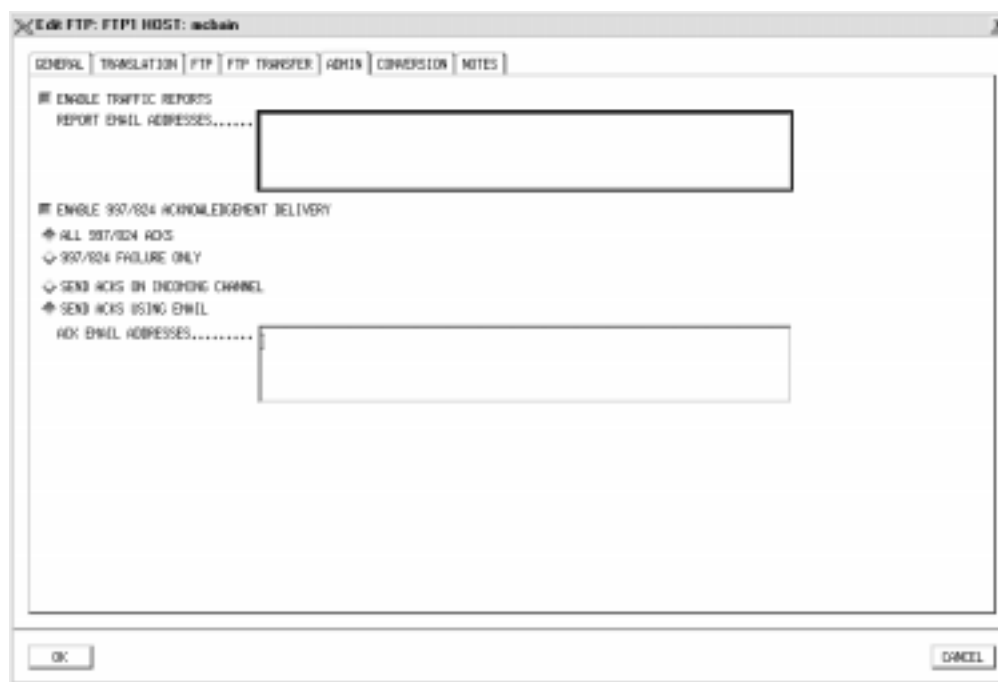


5. To navigate through the document, use the arrow icons in the toolbar located directly above the displayed document.
6. To exit the document, select File > Exit.
7. To save your changes, click OK in the edit channel window. The changes will go into effect when the next communications session is initiated.

### 4.1.3 Administration Settings

The ADMIN tab in the edit channel window enables you to configure the channel to transmit [traffic reports](#) and 997 and 824 [acknowledgements](#) to specific sites.

Figure 4.1-20 Edit Channel Window: ADMIN Tab



#### To configure a channel to transmit traffic reports

Traffic reports (also known as message reports) contain information about the channel's daily activity. These reports include such information as the following:

- The total number of files received and transmitted by the channel (including file name, time of receipt or transmit, and file size)
- A summary of each transaction processed and transmitted by the channel (including ICN number, time of processing or transmit, and file name)
- A breakdown of each transaction processed and transmitted by the channel (including GCN, GS03, and ST information)
- The total number of RFQs processed and transmitted by the channel, including a breakdown of each transaction type, GS02, and solicitation number

A sample traffic report is provided in [Appendix F](#).

The system automatically collects traffic report data for each channel on a daily basis. When the MsgReporter utility is run (either manually or automatically), this data is generated into a traffic report (one for each channel). If the MsgReporter utility does not run, traffic reports are not generated; however, the report data is still collected and stored on the system. (For more information on using the MsgReporter utility, see [Appendix J](#) of the *System Administrator's Guide for Electronic Commerce Processing Node*.) You can configure the channel to transmit the daily traffic reports automatically to a list of email addresses that you specify.

All traffic reports, whether or not they have been transmitted, are placed in the message log ([Figure 3.1-1](#)). Each traffic report is listed as <channel name>.msgrrpt and does not display an entry in the MSG TOR column. To view the report, select the entry for the report in the Message Log window and from the menu bar, select **Message > Formatted Message**. The JDS Viewer appears, displaying the traffic report. (For more information on using the message log and JDS Viewer, see [Section 3.1](#).)

1. In the edit channel window, click the ADMIN tab.
2. Select the ENABLE TRAFFIC REPORTS check box.
3. In the REPORT EMAIL ADDRESSES field, enter each email address to which to transmit a daily traffic report, using commas to separate each address.
4. To save your changes, click OK. The changes will go into effect when the next communications session is initiated.

### To configure a channel to transmit 997 and 824 acknowledgements

Acknowledgements are messages generated by the translator that provide information on the success or failure of a message's translation. You can configure a channel to transmit acknowledgements either for all translated messages or for only those that fail translation. These acknowledgements can be transmitted either to the originating site over the incoming channel or to any email address that you specify.

ECPN supports two types of acknowledgements: 997 and 824. A 997 acknowledgement contains status information about an X12→UDF translation. An 824 acknowledgement contains status information about a UDF→X12 translation, with the exception of 824s generated for SAACONS (as explained in the [DESCRIPTION](#) box of the TRANSLATION tab when SAACONS is selected as the MESSAGE TYPE).

Each 997 and 824 acknowledgement generated by the translator is listed in the message log. Because these acknowledgements are system-generated messages, the ORIGINAL FILE NAME and MSG TOR fields in the Message Log window do not contain entries. To

determine whether a message in the log is an acknowledgement, consult the **Linkages** field in the **JDS Viewer** for the message. (For instructions on using the message log and **JDS Viewer**, see [Section 3.1.](#))

1. In the edit channel window, click the **ADMIN** tab.
2. Select the **ENABLE 997/824 ACKNOWLEDGEMENT DELIVERY** check box.
3. To specify when to send acknowledgements, select one of the following option buttons:
  - **ALL 997/824 ACKS** – Sends an acknowledgement for each translated message (whether it passes *or* fails translation)
  - **997/824 FAILURE ONLY** – Sends an acknowledgement only if a message fails translation
4. To specify how to send acknowledgements, select one of the following option buttons:
  - **SEND ACKS ON INCOMING CHANNEL** – Sends each acknowledgement back to the sender on the channel by which the message arrived. The acknowledgement is sent in the same format as the original incoming message, either UDF or X12.
  - **SEND ACKS USING EMAIL** – Sends each acknowledgement in the form of an email message. In the **ACK EMAIL ADDRESSES** field, enter each email address to which the acknowledgements should be sent, using commas to separate each address. Each acknowledgement is sent in the same format as the original incoming message, either UDF or X12.
5. To save your changes, click **OK**. The changes will go into effect when the next communications session is initiated.

## 4.1.4 Character Conversion Settings

The types of data element separators and segment terminators used within a message may vary from site to site, depending on the software used at the site. If the outgoing message contains separators and terminators that are *not* used by the intended recipient, ECPN must replace these characters before routing the message. These character conversions are necessary to convert the outgoing message into a readable format. Character conversions are not necessary when routing a message to a site that uses the same separators and terminators as the message originator.

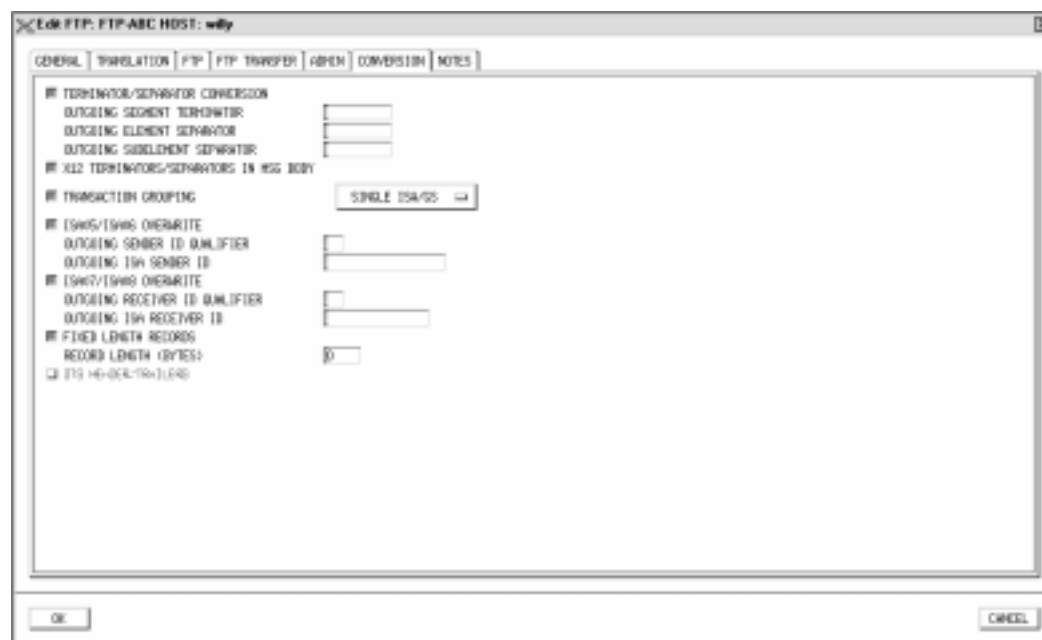
The **CONVERSION** tab in the edit channel window enables you to specify whether and how to replace the following special characters in all outgoing messages from the channel:

- Segment terminator – Inserted after the last data element in a segment, marking the end of the segment (e.g., NL).
- Element separator – Precedes each data element within a segment to separate one item from another.
- Subelement separator – Separates each data subelement within a message segment.
- ISA sender qualifier – Dictates how to interpret the sender identifier (ISA 05).
- ISA sender identifier – Identifies the sender of an interchange (ISA 06).
- ISA receiver qualifier – Dictates how to interpret the receiver identifier (ISA 07).
- ISA receiver identifier – Identifies the receiver of an interchange (ISA 08).

You may also choose whether to send a message if it contains a character that is also specified as a replacement character for a separator or terminator.

1. In the edit channel window, click the **CONVERSION** tab.

Figure 4.1-21 Edit Channel Window: *CONVERSION* Tab



2. Select or clear the **TERMINATOR/SEPARATOR CONVERSION** check box to indicate whether the characters currently used as separators and terminators within a message should be converted when the message is transmitted.
  - If this box is selected, the separators and terminators currently used in the message will be replaced with the entries specified in the **OUTGOING SEGMENT TERMINATOR**, **OUTGOING ELEMENT SEPARATOR**, and **OUTGOING SUBELEMENT SEPARATOR** fields. Note that you may enter **NONE** in any of the **OUTGOING SEPARATOR** or **TERMINATOR** fields or leave them blank.
  - If this box is cleared, the separators and terminators currently used in the message will remain the same when the message is transmitted. Note that the **OUTGOING SEPARATOR** and **TERMINATOR** fields will be unavailable, and the entries in the

fields will be cleared. However, these entries will be restored when the **TERMINATOR/SEPARATOR CONVERSION** check box is selected again, provided that the entries were not manually deleted.

---

### NOTES ON OUTGOING TERMINATOR AND SEPARATOR FIELDS

---

With the exception of **NONE**, the character or hexadecimal value entered in the **OUTGOING SEGMENT TERMINATOR**, **ELEMENT SEPARATOR**, and **SUBELEMENT SEPARATOR** fields *must be unique*.

For command codes (e.g., **NL**) and other non-printable characters, you *must* use the hexadecimal value.

For the segment terminator, you may enter up to two characters (e.g., **~** or **~~**) or up to two hexadecimal values (e.g., **7E** or **7E7E**). You cannot mix characters and hexadecimal values (e.g., **~7E** is not a valid entry).

You can enter only one character or hexadecimal value for the element and subelement separators.

---

3. (Optional) In the **OUTGOING SEGMENT TERMINATOR** field, enter the alphanumeric character or symbol, or its hexadecimal value (e.g., **0A**), to replace the current segment terminator in all outgoing messages from the channel.
4. (Optional) In the **OUTGOING ELEMENT SEPARATOR** field, enter the alphanumeric character or symbol (e.g., **\***), or its hexadecimal value (e.g., **2A**), to replace the current element separator in all outgoing messages from the channel.
5. (Optional) In the **OUTGOING SUBELEMENT SEPARATOR** field, enter the alphanumeric character or symbol (e.g., **<**), or its hexadecimal value (e.g., **3C**), to replace the current subelement separator in all outgoing messages from the channel.
6. Select or clear the **X12 TERMINATORS/SEPARATORS IN MSG BODY** check box to indicate whether a message should be sent if it contains a character that is also specified as a replacement character for a separator or terminator.
  - When this box is selected, ECPN performs the character conversions and then transmits the message. A **SEGTERM CONFLICT** alert is generated for the both the incoming and the outgoing channels. When these messages are transmitted, they usually cannot be read by the recipient's system because the character in the message body is interpreted as a separator or terminator. (For information on resolving a **SEGTERM CONFLICT** alert, see [Appendix B](#).)
  - When this box is cleared, ECPN will not transmit the message if it detects that a replacement character specified in the outgoing terminator or separator fields also appears in the body of the outgoing message. The message is then removed from the outgoing channel queue or outgoing email queue and placed in the error queue. ECPN

also generates a SEGTERM FAILURE alert for the incoming channel. (For information on using the error queue, see [Section 3.2](#). For information on resolving a SEGTERM FAILURE alert, see [Appendix B](#).)

7. Select or clear the TRANSACTION GROUPING check box to indicate whether an outgoing message containing multiple ISAs, GSs, and STs should be converted into multiple messages, each containing one or more groups of transactions. (The selection in the [MESSAGE TYPE](#) field determines whether the TRANSACTION GROUPING check box may be cleared and whether a method of transaction grouping may be selected.) Selection of this check box requires the selection from the adjacent list box of one of the following methods of transaction grouping:

- SINGLE ISA/GS/ST: Message is converted into multiple messages at the ST level. Each message contains a single ISA/GS/ST.
- SINGLE ISA/GS: Message is converted into multiple messages at the GS level. Each message contains a single ISA/GS but may contain multiple STs.

8. Select or clear the ISA05/ISA06 OVERWRITE check box to indicate whether the ISA05 and ISA06 fields should be overwritten (with the values specified in [Steps 9](#) and [10](#)) when the message is sent.

When this option is cleared, the qualifier and sender ID currently used in the message will remain the same when the message is sent out. Note that the sender ID fields are unavailable, and entries in the fields are cleared. (These entries will be restored when the ISA05/ISA06 OVERWRITE check box is selected again, provided that the entries were not manually deleted.)

9. (Optional) In the OUTGOING SENDER ID QUALIFIER field, enter the qualifier (e.g., ZZ) to replace the ISA05 field (Sender Interchange ID Qualifier) in all messages transmitted from the channel. Note that an entry in the OUTGOING SENDER ID QUALIFIER field *requires* an entry in the OUTGOING ISA SENDER ID field.

10. (Optional) In the OUTGOING ISA SENDER ID field, enter the identifier (e.g., DMCODEN or DMCCOLUMBUS) to replace the ISA06 field (Interchange Sender ID) in all messages transmitted from the channel. Note that an entry in the OUTGOING ISA SENDER ID field *requires* an entry in the OUTGOING SENDER ID QUALIFIER field.

11. Select or clear the ISA07/ISA08 OVERWRITE check box to indicate whether the ISA07 and ISA08 fields should be overwritten (with the values specified in [Steps 12](#) and [13](#)) when the message is sent.

When this option is cleared, the qualifier and receiver ID currently used in the message will remain the same when the message is sent out. Note that the receiver ID fields are unavailable, and entries in the fields are cleared. (These entries will be restored when the ISA07/ISA08 OVERWRITE check box is selected again, provided that the entries were not manually deleted.)



12. (Optional) In the OUTGOING RECEIVER ID QUALIFIER field, enter the qualifier (e.g., ZZ) to replace the ISA07 field (Receiver Interchange ID Qualifier) in all messages transmitted from the channel. Note that an entry in the OUTGOING RECEIVER ID QUALIFIER field *requires* an entry in the OUTGOING ISA RECEIVER ID field.
13. (Optional) In the OUTGOING ISA RECEIVER ID field, enter the identifier (e.g., PUBLIC) to replace the ISA08 field (Interchange Receiver ID) in all messages transmitted from the channel. Note that an entry in the OUTGOING ISA RECEIVER ID field *requires* an entry in the OUTGOING RECEIVER ID QUALIFIER field.
14. Some remote systems impose a maximum record or line length, and data that exceeds this limit may be lost during file transfers. If you set a fixed line length, the outgoing message is formatted into individual records, based on the record size that you specify. To enable fixed line lengths:
  - a. Select the FIXED LENGTH RECORDS check box.
  - b. In the RECORD LENGTH field, enter the record length (in bytes). For example, an entry of 80 specifies that a line break will be inserted after every 80 bytes in the message. Note that this formatting occurs *after* segment terminator conversion.
15. (UDF channels only) Select or clear the DTS HEADER/TRAILERS check box to indicate whether a Defense Travel System (DTS) header and trailer should be added to each UDF file transmitted from the channel.
16. To save your changes, click OK. The changes will go into effect when the next communications session is initiated.

## 4.1.5 Channel POC Information and Notes

The **NOTES** tab in the edit channel window enables you to enter, view, and edit point-of-contact (POC) information and notes for the channel.

1. In the edit channel window, click the **NOTES** tab.

*Figure 4.1-22 Edit Channel Window: NOTES Tab*



2. In the **POC** text box, enter, view, or edit the POC information (e.g., name, address, telephone numbers) for the receiver of outgoing communications from the channel.
3. In the **NOTES** text box, enter, view, or edit any information relevant to the channel, such as notes about channel activity, reminders, or names of other contacts.
4. To save your changes, click **OK**. The changes will go into effect when the next communications session is initiated.

## 4.1.6 CLEO Settings

For a CLEO channel, you can view or modify the settings that are unique to the CLEO interface by choosing the **CLEO** tab within the edit channel window. The **CLEO** tab enables you to enter the parameters for transmitting messages; select the modem, protocol, and terminal types; activate and deactivate space compression and new-line character suppression; and set the channel to transmit-only mode during a COOP.

1. In the edit channel window, click the **CLEO** tab.

Figure 4.1-23 Edit Channel Window: CLEO Tab

The screenshot shows the 'Edit CLEO: CLEO AIS HOST: mcbain' dialog box with the 'CLEO' tab selected. The dialog contains the following fields and options:

- GENERAL** | **TRANSLATION** | **CLEO** | **ADMIN** | **CONVERSION** | **NOTES**
- XMIT RECORD SIZE ...**: 80
- REPEAT LIMIT .....**: 4
- RE-XMIT LIMIT .....**: 4
- WAIT LIMIT .....**: 10
- DELAY LIMIT .....**: 10
- BID LIMIT .....**: 15
- RECEIVE LIMIT .....**: 15
- BLOCKING FACTOR ....**: 1
- BYTE LIMIT .....**: 200000
- MODEM TYPE ....**: CCITT V.26bis or Bell 201C (2400 BPS)
- PROTOCOL .....**: 3780
- TERM TYPE ....**: PRIMARY
- ☒ **COMPRESSION**
- ☒ **SUPPRESS NL**
- ☐ **TRANSMIT ONLY**
- ☐ **BINARY TRANSFER**
- OK** | **SCRIPT** | **CANCEL**

2. In the **XMIT RECORD SIZE** field, enter the maximum size (in bytes) for a transmission record.
3. In the **REPEAT LIMIT** field, enter the maximum number of consecutive times that an enquiry message should be sent as a repeat message without an appropriate response.
4. In the **RE-XMIT LIMIT** field, enter the maximum number of consecutive times that a negative acknowledgment may be sent or received before transmission is aborted.

5. In the **WAIT LIMIT** field, enter the maximum number of consecutive times that a wait message should be received before transmission is aborted.
6. In the **DELAY LIMIT** field, enter the maximum number of consecutive times that a delay message should be received before the transmission is aborted.
7. In the **BID LIMIT** field, enter the maximum number of consecutive times that an enquiry message should be sent as a line bid without receiving acknowledgment.
8. In the **RECEIVE LIMIT** field, enter the maximum number of consecutive times that a receive timeout may occur in receive mode before the transmission is aborted.
9. In the **BLOCKING FACTOR** field, enter the number of records to be transmitted in one block.
10. In the **BYTE LIMIT** field, enter the maximum number of bytes that may be processed before the transmission or receipt of a message is aborted. The default value is 0, indicating that messages are transmitted or received regardless of size.
11. In the **MODEM TYPE** field, click the list box to display a list of modems that may be used by the channel. For more information on modem types, refer to the *CLEO 3780Plus User's Guide, Appendix A, Modem Support*.
12. In the **PROTOCOL** field, click the list box to display a list of protocol types. Select an entry (either 2780 or 3780) from the list.
13. In the **TERM TYPE** field, click the list box to display a list of terminal types. Select an entry from the list as follows:
  - **PRIMARY** – To send line bid messages at one-second intervals.
  - **SECONDARY** – To send line bid messages at three-second intervals.
14. Select or clear the **COMPRESSION** check box to activate or deactivate space compression on transmitted messages. When activated, two or more consecutive spaces are removed from transmitted text files.
15. Select or clear the **SUPPRESS NL** check box to activate or deactivate new line character suppression. When activated, all record separators are ignored. When deactivated, any record separators received in text files are translated to new line characters in UNIX.

16. Select or clear the **TRANSMIT ONLY** check box to set the communication mode for the channel. When this check box is selected, the channel sends messages but does not receive them. When this check box is cleared, the channel sends and receives messages.

The primary reason to activate transmit-only mode is to delete queued messages after a Continuity of Operations (COOP). For example: If DMC-Ogden assumes communications for DMC-Columbus, DMC-Ogden should activate all of its Columbus channels in the communications channel database and all of its Columbus routes in the routing database. When DMC-Columbus returns online, DMC-Ogden should configure all of the Columbus channels to transmit only, which causes these channels to transmit all queued messages but not receive any new messages. Once the queues have cleared, DMC-Ogden should deactivate all channels and routes that it assumed from DMC-Columbus.

Note that you can set the transmit-only function for one or more channels by selecting **Edit > Set Xmit-Only** from the menu bar in the **Communications Manager**.

For more information on archiving COOP data after assuming communications for another site or restoring this data (at the site for which the COOP was performed), see [Appendix I](#).

17. Select or clear the **BINARY TRANSFER** check box to indicate whether files should be sent as binary or ASCII data. Select the check box to send the files as binary, or clear it to send them as ASCII.

Note that if you select ASCII transfer mode, ECPN checks the message for characters that do not translate from ASCII to Extended Binary Coded Decimal Interchange Code (EBCDIC) or that affect transmit stream handling (as described in Table 6.1 of the *CLEO 3780Plus User's Guide*). If such characters are found, the message is removed from the outgoing channel queue and placed in the error queue, and a **CLEO ASCII** error is generated. The following ASCII characters are not allowed: 0-5, 7, 16, 22-23, 29-31, 128-154, 156-178, 180-255.

18. To save your changes, click **OK**. The changes will go into effect when the next communications session is initiated.

## 4.1.7 Email Settings

ECPN determines how to route incoming and outgoing email messages based on the settings that you specify in the communications channel database. For incoming messages, ECPN assigns a source channel to the message by matching its From address as closely as possible with a corresponding entry in the communications channel database. If no matches are found for the complete address, ECPN attempts to match the domain name. If no match is found in the communications channel database for the message's From address, the message is sent to the rejected email mailbox (discussed in [Section 3.4](#)), and an unknown sender alert is generated.

You can specify the From and Send To addresses for incoming and outgoing email messages, as well as view or modify other settings that are unique to the email interface, by choosing the EMAIL tab within the edit channel window.

- All incoming email messages must be addressed to `ecedi@<fully qualified domain name of the local ECPN site>`.
- Each From address must be associated with an email channel. If a message is received from an email address that does not have an associated email channel (an unknown sender), the message is sent to the rejected email mailbox, and an **UNK SENDER** alert is generated.
- Before installing the ECPN software, the system administrator must ensure that an `ecedi` entry appears in the `/etc/passwd` file for the system email account. For more information on configuring email user accounts, see [Appendix B](#) of the *Software Administrator's Guide for Electronic Commerce Processing Node*.

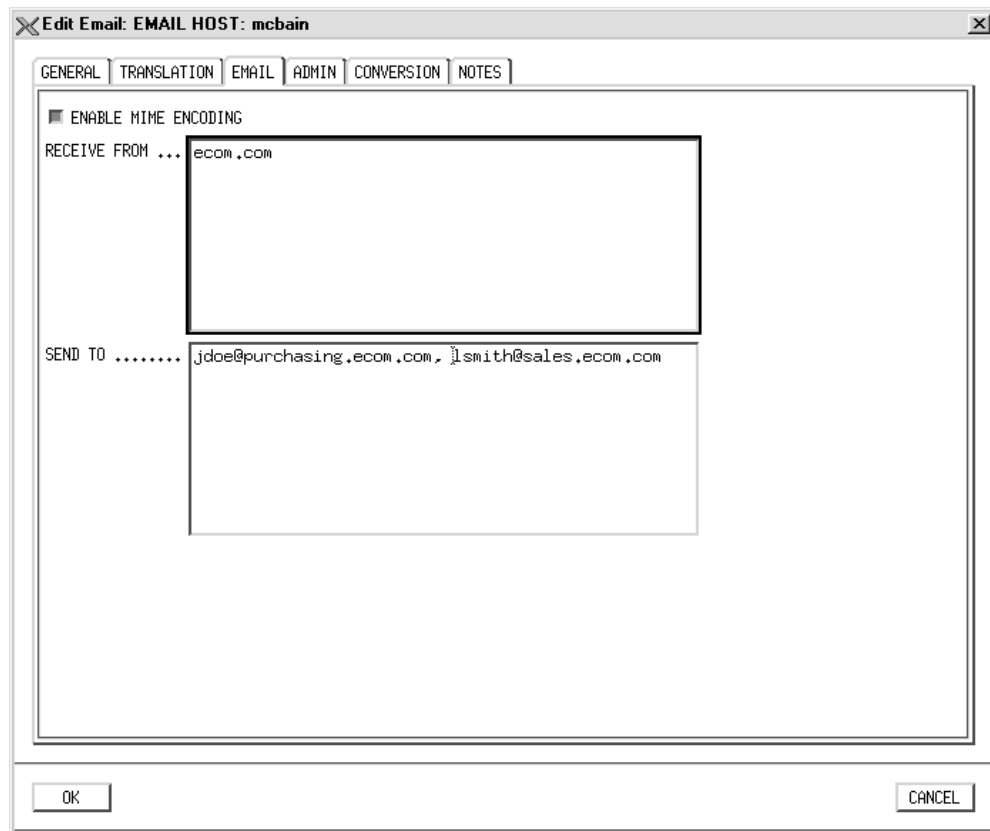
---

**NOTE:** Before ECPN can process email messages, the system administrator must enable email communications as described in [Appendix C](#) of the *System Administrator's Guide for Electronic Commerce Processing Node*.

---

1. In the edit channel window, click the **EMAIL** tab.

*Figure 4.1-24 Edit Channel Window: EMAIL Tab*



2. Select or clear the **ENABLE MIME ENCODING** check box to indicate whether outgoing messages from this channel should be encoded in Multipurpose Internet Mail Extensions (MIME) format. Select this check box only if the receiving site is capable of handling MIME messages.

3. Each email address from which you will be receiving messages must be assigned to an email channel; otherwise, the message is sent to the rejected email mailbox, and an unknown sender alert is generated.

In the **RECEIVE FROM** field, enter the email address(es) that you wish to assign to the channel. Follow these guidelines for entering address information in this field:

- When entering multiple addresses, use a comma to separate the entries.
- You may enter a full email address or a domain name, depending on how restrictive you wish the match to be. Using the fictitious company, Ecom Inc., as an example, [Table 4.1-6](#) provides guidelines for determining how much detail to enter in the **RECEIVE FROM** field.

Example: Ecom Inc. is a new trading partner, and you have added an email channel, named ECOM, to the communications channel database.

*Table 4.1-6 Example Email Channel Receive From Options*

To assign to the channel	Enter the following	Results in
One or more full email addresses  Examples: jdoe@ecom.com ssmith@ecom.com	jdoe@ecom.com, ssmith@ecom.com	All email messages received from jdoe@ecom.com and ssmith@ecom.com are assigned to the ECOM channel. All other email messages from ecom.com will be rejected.*
One or more domain names  Examples: user@purchasing.ecom.com user@sales.ecom.com	purchasing.ecom.com, sales.ecom.com	All email messages received from the domains purchasing.ecom and sales.ecom.com will be assigned to the ECOM channel. All other messages received from ecom.com will be rejected.*
One all-encompassing domain name  Example: user@anything.ecom.com	ecom.com	All email messages from ecom.com will be assigned to the ECOM channel.

\*Alternative: You can create another channel, ECOM2, to receive all other messages addressed from “ecom.com,” as described in the table’s last entry.



- You cannot assign a receive from address or domain name to more than one channel. |
  - At least the last two elements in a message's from address must match an entry in the RECEIVE FROM field. For example, .com is not a valid entry. |
4. In the SEND TO field, enter the email address of each intended recipient of outgoing messages routed by this channel. When entering multiple email addresses, use a *comma* to separate the entries. Do not use a carriage return to separate the entries; if you do, the entries will be treated as a single email address, resulting in an invalid address. |
  5. To save your changes, click OK. The changes will go into effect when the next communications session is initiated. |

## 4.1.8 FTP Settings

You can view or modify the settings that are unique to the FTP interface by choosing the **FTP** and **FTP TRANSFER** tabs within the edit channel window. The **FTP** tab enables you to view and edit the login information for the remote connection. The **FTP TRANSFER** tab enables you to view and edit file transfer, trigger, and pull options and to set the communications mode for the channel.

---

**NOTE:** The system administrator may set up an account group that enables passive FTP users to transmit messages to ECPN. For more information on configuring a passive FTP user, see [Appendix B](#) in the *System Administrator's Guide for Electronic Commerce Processing Node*.

---

### To view and edit FTP remote login information

1. In the edit channel window, click the **FTP** tab.

*Figure 4.1-25 Edit Channel Window: FTP Tab*

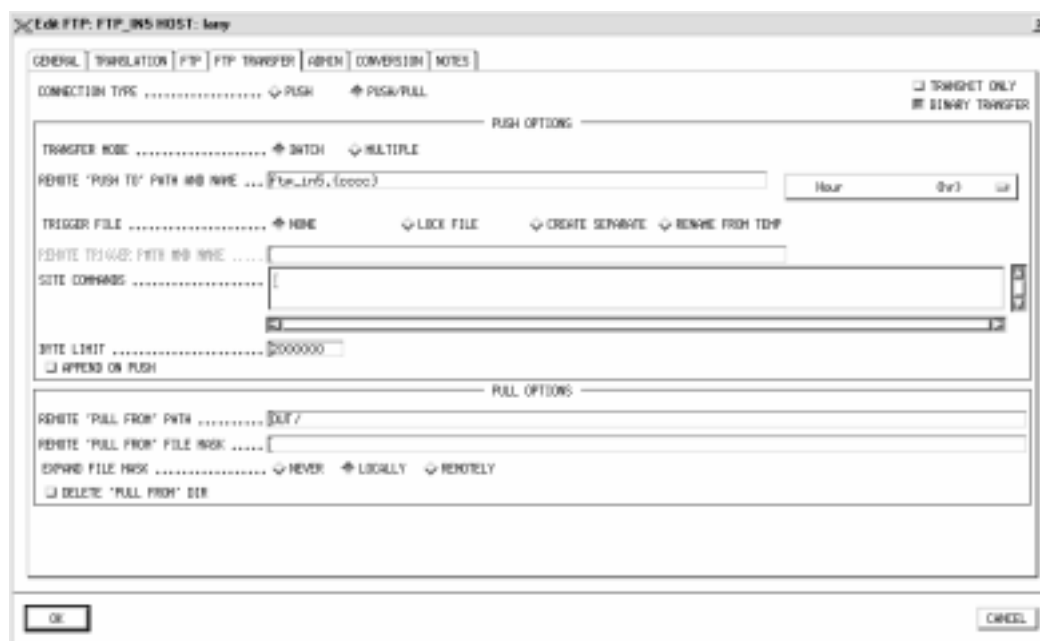


2. In the **HOSTNAME/IP ADDR** field, enter either the machine name or the numeric Internet Protocol (IP) address of the remote host.
3. In the **LOGIN NAME** field, enter the login name designated for FTP login use at the remote host.
4. In the **PASSWORD** field, enter the password for the specified login name at the remote host.
5. In the **REMOTE WORKING DIR** field, enter the path of the working directory from which all FTP transactions should occur after login. Note the following:
  - If the FTP login directory is the working directory (which is true for most systems), this field can be left blank.
  - Some remote systems require the establishment of a working directory prior to processing further requests. In this case, the **REMOTE WORKING DIR** field should contain the proper working directory for the remote system.
  - Some remote systems do not support the command to change directories. In this case, the **REMOTE WORKING DIR** field should remain blank.
  - The working directory can be used to shorten the entry requirements in the following fields in the **FTP TRANSFER** tab ([Figure 4.1-26](#)):
    - **REMOTE 'PUSH TO' PATH AND NAME**
    - **REMOTE TRIGGER PATH AND NAME**
    - **REMOTE 'PULL FROM' PATH**
6. (Optional) Some remote systems require an account name in addition to the login and password for access to the remote host. In this event, enter the account name designated for FTP login use in the **ACCOUNT** field.
7. The FTP commands accepted by the remote host may vary according to the remote server's operating system. For this reason, you should specify the operating system platform used by the remote host. For example, when the **DELETE 'PULL FROM' DIR** button in the **FTP TRANSFER** tab ([Figure 4.1-26](#)) is activated, the setting in the **REMOTE OS** list box determines which commands ECPN issues to delete the empty container directory on the remote system. To specify the operating system, click the **REMOTE OS** list box and select an entry from the list (e.g., **HP-UX**, **Solaris**, **VAX/VMS**, **Windows NT**). Note that **Unknown** is the default selection.
8. To save your changes, click **OK**. The changes will go into effect when the next communications session is initiated.

## To view and edit FTP transfer parameters

1. In the edit channel window, click the FTP TRANSFER tab.

Figure 4.1-26 Edit Channel Window: FTP TRANSFER Tab



2. To specify the connection protocol for the channel, select one of the **CONNECTION TYPE** option buttons:
  - **PUSH** is a send-only protocol. If this option button is selected, ECPN only transmits messages to the specified “in” directory on the remote host, as indicated in the **REMOTE ‘PUSH TO’ PATH AND NAME** field.
  - **PUSH/PULL** is a send-and-receive protocol. If this option button is selected, ECPN transmits messages to the specified “in” directory of the remote host (as indicated in the **REMOTE ‘PUSH TO’ PATH AND NAME** field) and retrieves any waiting messages from the specified “out” directory of the remote host. If the “in” and “out” directories are the same, you must enter filter information in the **REMOTE ‘PULL FROM’ FILE MASK** field (as described in [Step 13](#)).
3. Select or clear the **TRANSMIT ONLY** check box to set the communication mode for the channel. When this check box is selected, the channel sends messages but does not receive them. When this check box is cleared, the channel returns to the setting in place (push or push/pull) before the transmit-only mode was activated.

The primary reason to activate transmit-only mode is to delete queued messages after a Continuity of Operations (COOP). For example: If DMC-Ogden assumes communications for DMC-Columbus, DMC-Ogden should activate all of its Columbus channels in the communications channel database and all of its Columbus routes in the routing database. When DMC-Columbus returns online, DMC-Ogden should configure all of the Columbus channels to transmit only, which causes these channels to transmit all queued messages but not receive any new messages. Once the queues have cleared, DMC-Ogden should deactivate all channels and routes that it assumed from DMC-Columbus.

Note that you can set the transmit-only function for one or more channels by selecting **Edit > Set Xmit-Only** from the menu bar in the **Communications Manager**.

For more information on archiving COOP data after assuming communications for another site or restoring this data (at the site for which the COOP was performed), see [Appendix I](#).

4. Select or clear the **BINARY TRANSFER** check box to indicate whether files should be sent as binary or ASCII data. Select the check box to send the files as binary, or clear it to send them as ASCII.
5. In the **PUSH OPTIONS** box, select one of the **TRANSFER MODE** option buttons to specify the mode of file transfer:
  - **BATCH** – Transfers one or more messages per file, depending on the variable(s) included in the file name of each message. For information on variables, see [Step 6](#).
  - **MULTIPLE** – Transfers one message per file.

---

**NOTE:** All administrative messages sent by ECPN (i.e., message reports and 824 or 997 acknowledgements) are transferred as one message per file, regardless of the **TRANSFER** mode set.

---

6. In the **REMOTE 'PUSH TO' PATH AND NAME** field, enter the path and file name on the remote host to which ECPN should push files. The path entered may be absolute or relative to the [remote working directory](#). Note that this field cannot be left blank, regardless of whether the channel is set to **PUSH** or **PUSH/PULL**.

When entering the file name in the path, you may use one or more *variables* as placeholders for specific elements of data. The system expands each variable to its appropriate value at the time of transmission. To enter a variable, click the list box to the right of the field to display a list of valid variables, and then select one from the list. [Table 4.1-7](#) describes the variables that are valid for all message types. Additional variables may be valid for a specific message type. (For example, the {saacons-sid})

variable is valid if SAACONS is selected in the [MESSAGE TYPE](#) field). For a list of valid variables for a particular message type, see the [DESCRIPTION](#) box of the TRANSLATION tab of the edit channel window.

*Table 4.1-7 FTP Channel File Name Variables*

Variable name	Variable	As expanded
Hour	{hr}	00 to 23
Minute	{min}	00 to 59
Second	{sec}	00 to 59
Time	{time}	0000 to 2359
Day of the Month	{day}	01 to 31
Month	{mon}	01 to 12
Year (4 digit)	{year}	e.g., 1999
Year (2 digit)	{yr}	e.g., 99
Day of the Year	{jul}	001 to 366
Source XREF	{sxrf}	Channel reference for the message's source (as entered in the <a href="#">GENERAL</a> tab of the edit channel window)
Destination XREF	{drxf}	Channel reference for the message's destination (as entered in the <a href="#">GENERAL</a> tab of the edit channel window)
Counter (1 digit)	{c}	Counters are explained <a href="#">later</a> in these instructions
Counter (2 digits)	{cc}	
Counter (3 digits)	{ccc}	
Counter (4 digits)	{cccc}	
Counter (5 digits)	{ccccc}	
Counter (6 digits)	{cccccc}	
Counter (7 digits)	{ccccccc}	
Counter (8 digits)	{cccccccc}	

When entering a path and file name into either the REMOTE 'PUSH TO' PATH AND NAME or the REMOTE TRIGGER PATH AND NAME field (discussed in [Step 8](#)), note the following:

- A file name must be specified in the field. The field cannot contain only a pathname or be left empty.
  - Each variable must be contained within a brace set (i.e., { }).
  - Text entered within a brace set must consist of a valid variable (i.e., one from the list box to the right of the field).
  - All time variables are expanded using ZULU time.
  - Nested and unmatched braces are not allowed.
  - Characters outside of brace sets are interpreted as inserted (i.e., not expanded). Spaces are not allowed.
  - One counter variable is allowed per file name. Each counter begins at 0 (padded with additional zeros according to the number of C variables entered) and resets to 0 when each digit reaches 9. (For example, an entry of {CCCC} resets to 0000 when 9999 is reached.) The counter increments once for each transmitted file.
  - The file name should be a unique name on the remote system. To ensure that the file name is unique, you may either use a counter in the name or use a generation data set name on systems that support this function.
7. To specify the type of trigger for the channel, select one of the **TRIGGER FILE** option buttons. Note that if a selection other than **NONE** is made, an entry is required in the **REMOTE TRIGGER PATH AND NAME** field. The trigger options are as follows:
- **NONE** – A trigger file is not used. When **NONE** is selected, the **REMOTE TRIGGER PATH AND NAME** field is unavailable.
  - **LOCK FILE** – During file transfer, a trigger file (acting as a lock) is placed in the directory specified in the **REMOTE TRIGGER PATH AND NAME** field. When the file transfer is complete, the trigger file is removed. The transmittal of a message is considered successful upon the removal of the trigger file.
  - **CREATE SEPARATE** – When file transfer is complete, a trigger file (containing the name of the original file) is placed in the specified directory on the remote host. The transmittal of a message is considered successful upon the creation and transmission of the trigger file to the remote host.
  - **RENAME FROM TEMP** – During file transfer, a temporary trigger file is placed on the remote host (the path and file name are taken from the entry in the **REMOTE TRIGGER PATH AND NAME** field). When the file transfer is complete, the trigger file is renamed as specified in the **REMOTE 'PUSH TO' PATH AND NAME** field. The transmittal of a message is considered successful upon the renaming of the trigger file.

Note that if you select the RENAME FROM TEMP trigger option, you *must* clear the APPEND ON PUSH check box (discussed in [Step 11](#)). If the APPEND ON PUSH check box is selected, and you select REMOTE TRIGGER PATH AND NAME, the following warning message appears when you click OK in the edit channel window:

SELECTING RENAME FROM TEMP TRIGGER OPTION WHEN APPEND ON PUSH IS CHOSEN IS NOT ALLOWED. THE TRIGGER OPTION IS RESET TO NONE.

8. In the REMOTE TRIGGER PATH AND NAME field, enter the path and file name on the remote host in which ECPN should place trigger file(s). The path entered may be absolute or relative to the remote working directory. For information on entering a file name, see [Step 6](#).

---

#### NOTES ON ENTERING FTP SITE COMMANDS

The proper syntax for a site command depends on the remote site's FTP server. Not all commands are supported by all FTP servers. For a listing of acceptable commands and syntax guidelines, connect to the remote FTP site and consult its help page (using the `help site` or `quote site help` command).

---

9. (Optional) Some remote FTP servers support the use of site commands to perform specific functions such as changing file and directory permissions, defining the block size for pulled files, or setting maximum file lengths. In the SITE COMMANDS field, enter the site-specific command(s) that you wish to perform on the remote FTP server. Note that each command should be entered on its own line, followed by a [Enter]. The most common format is `site <command>`; however, for some servers you may have to use the format: `quote site <command>`.

For example, if the site supports the `lrecl` and `blocksize` commands, you may enter the maximum record length and block size for all files to be pulled by the channel in the SITE COMMANDS field. Using this example, to set the maximum record length to 80 bytes and the block size to 512 KB, enter the following commands in the SITE COMMANDS field:

```
site lrecl(80)
site blocksize(512)
```

10. For batch mode file transfers, enter the byte size of data that you wish to transmit at a time in the BYTE LIMIT field. The default value is 20000, indicating the message will be transmitted in chunks of 2 MB. Note that this field is unavailable for multiple mode.

---

**CAUTION:** For batch mode file transfers, you should select the APPEND ON PUSH check box or use a counter in the file name. If you clear the APPEND ON PUSH check box and do not use a counter in the file name, each new chunk of data that is transmitted will overwrite the previously transmitted chunk of data.

---



11. Select or clear the **APPEND ON PUSH** check box to indicate whether files are transmitted using the FTP append command or the FTP put command.
- To transmit files using the FTP append command, select the check box. With this command, data is transmitted in chunks, and each new block of transmitted data is attached (or appended) to the previously transmitted block of data. This box is selected by default when you add a channel.
  - To transmit files using the FTP put command, clear the check box. With this command, data is placed on the remote system. If the file already exists on the remote system and you are not using counters to ensure file uniqueness, the file you are transmitting will either overwrite the existing file (if the remote system allows) or the transmission will fail.

Note that you *must* deactivate this option if you select the **RENAME FROM TEMP** trigger option (as discussed in [Step 7](#)).

12. In the **REMOTE 'PULL FROM' PATH** field, enter the path and file name on the remote host from which ECPN should pull files. The path entered may be absolute or relative to the remote working directory. You must end this entry with the path delimiter required by the remote host. Other than verifying that the last character in the entry is non-alphanumeric, error checking does not occur. Note that if this field does not contain an entry, an attempt is made to pull the files from the remote working directory.
13. In the **REMOTE 'PULL FROM' FILE MASK** field, enter the name of the file(s) to be pulled from the remote host. An entry in this field is required if the channel is pushing to and pulling from the same directory. Otherwise, the channel will pull back the files that it just transmitted.

You may use wildcards (discussed in [Section 1.3](#)) in this field to pull a combination of files at once. For example, suppose the remote site uses the file name extension .out to signify which files should be pulled. To pull only those files that end with .out from the remote pull from directory, you should enter the wildcard \*.out in the **REMOTE 'PULL FROM' FILE MASK** field. Files not ending with the .out extension are ignored.

14. Select one of the **EXPAND FILE MASK** option buttons to specify how a file mask is handled when pulling files from the remote host:
- **NEVER** – Select this option button if you do not wish the entry in the **REMOTE 'PULL FROM' FILE MASK** field to be treated as a wildcard. For example, some systems allow symbols in the file name (e.g., \*) that are normally considered wildcards. If you select the **NEVER** option button, both the local and remote systems will treat the entry in the **REMOTE 'PULL FROM' FILE MASK** field as the exact file name and not as a wild card.

- **LOCALLY** – Select this option button only if the remote FTP server does not support wildcard character expansion. When this option is selected, the local host compares the contents of the remote pull-from directory with the filemask to determine which files should be retrieved.
  - **REMOTELY** – (Default setting) Select this option button if you want the remote FTP server to interpret the filemask and select which files should be retrieved from the remote pull-from directory. Remote file-pattern expansion results in faster, more efficient file transfers.
15. During file transfers, some remote systems generate a container directory. Once the files are pulled, the empty container directory remains on the remote system. To delete this empty container directory, select the **DELETE 'PULL FROM' DIR** check box. If this box is selected, you *must* set the **REMOTE OS** field in the **FTP** tab ([Figure 4.1-25](#)).
  16. To save your changes, click **OK**. The changes will go into effect when the next communications session is initiated.

## 4.1.9 Kermit Settings

You can view or edit the settings that are unique to the Kermit interface by choosing the **KERMIT** tab within the edit channel window. The **KERMIT** tab enables you to select the file transfer mode, enter the parameters for transmitting messages, specify the transmission baud rate and byte size, and select the level of error detection and parity for the transmission.

1. In the edit channel window, click the **KERMIT** tab.

*Figure 4.1-27 Edit Channel Window: KERMIT Tab*

**Edit Kermit: FILEXTKER HOST: mcbain**

GENERAL | TRANSLATION | **KERMIT** | ADMIN | CONVERSION | NOTES

**FILE TRANSFER**

TRANSFER MODE ..... ☒ BATCH ☒ MULTIPLE ☐ TRANSMIT ONLY

FILE NAME ..... kermit.{ccc}{sec}{hr}{jul}{min} jul

DIAL TIMEOUT ..(secs).. 60 BAUD ..... 9600

XMIT PACKET SIZE ..... 1024 BYTE SIZE .... 8

RECV PACKET SIZE ..... 1024 BLOCK CHECK ... 3

RECV EOP ..... 13 PARITY ..... NONE

ESCAPE CHAR ..... 28

WINDOW SIZE ..... 1

BYTE LIMIT ..... 0

OK SCRIPT CANCEL

2. In the FILE TRANSFER box, select one of the TRANSFER MODE option buttons to specify the mode of file transfer:

- **BATCH** – Transfers one or more messages per file depending on the variable(s) included in the file name of each message. For information on variables, see [Step 4](#).
- **MULTIPLE** – Transfers one message per file.

---

**NOTE:** All administrative messages sent by ECPN (i.e., message reports and 824 or 997 acknowledgements) are transferred as one message per file, regardless of the TRANSFER mode set.

---

3. Select or clear the TRANSMIT ONLY check box to set the communication mode for the channel. When this check box is selected, the channel sends messages but does not receive them. When this check box is cleared, the channel sends and receives messages.

The primary reason to activate transmit-only mode is to delete queued messages after a Continuity of Operations (COOP). For example: If DMC-Ogden assumes communications for DMC-Columbus, DMC-Ogden should activate all of its Columbus channels in the communications channel database and all of its Columbus routes in the routing database. When DMC-Columbus returns online, DMC-Ogden should configure all of the Columbus channels to transmit only, which causes these channels to transmit all queued messages but not receive any new messages. Once the queues have cleared, DMC-Ogden should deactivate all channels and routes that it assumed from DMC-Columbus.

Note that you can set the transmit-only function for one or more channels by selecting **Edit > Set Xmit-Only** from the menu bar in the **Communications Manager**.

For more information on archiving COOP data after assuming communications for another site or restoring this data (at the site for which the COOP was performed), see [Appendix I](#).

4. In the FILE NAME field, enter a name for all outgoing files to be transmitted by the channel. For information on entering a file name, see [Step 6](#) in *To view and edit FTP transfer parameters*.
5. In the DIAL TIMEOUT field, enter the time (in seconds) to wait before determining that a connection cannot be established.
6. In the XMIT PACKET SIZE field, enter the size of a transmitted data packet.
7. In the RECV PACKET SIZE field, enter the expected size of a received data packet.
8. In the RECV EOP field, enter the value for the expected receive end-of-packet character (decimal value).
9. In the ESCAPE CHAR field, enter the value for the escape character during “connect” (decimal ASCII value).

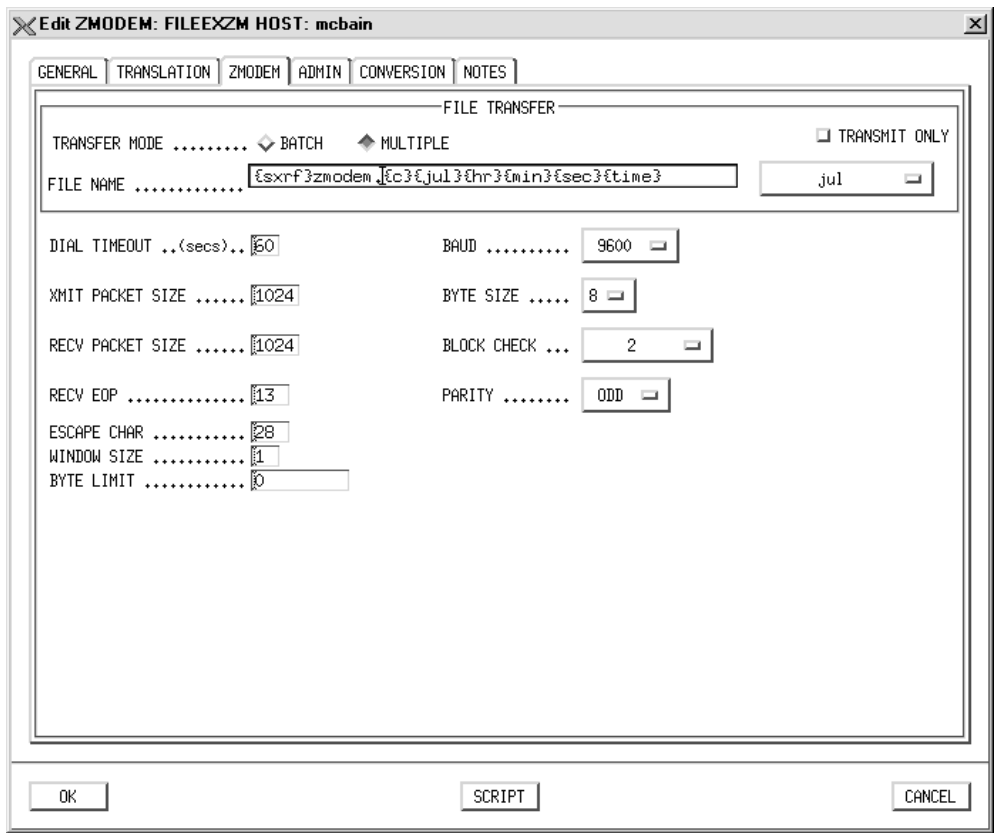
10. In the **WINDOW SIZE** field, enter the number of windows to use in the sliding windows protocol.
11. In the **BYTE LIMIT** field, enter the maximum number of bytes that may be processed before the transmission or receipt of a message is aborted. The default value is 0, indicating that messages are transmitted or received regardless of size.
12. Click the list box in the **BAUD** field to display a list of baud rates for transmission over the channel. Select an entry from the list.
13. Click the list box in the **BYTE SIZE** field to display a list of the number of bits per character for serial communications. Select an entry from the list. Note that ASCII and binary data types default to 8.
14. Click the list box in the **BLOCK CHECK** field to display a list of block check values. The value used indicates the level of error detection provided by Kermit. Type 1 and **BLANK FREE** catch most errors. Types 2 and 3 specify more rigorous checking, but at the cost of higher overhead. Select an entry from the list.
15. Click the list box in the **PARITY** field to display a parity list. From the list, select the parity for transmissions over the channel. The choices are as follows:
  - **NONE** – No error checking occurs.
  - **EVEN** – Transmits an even number of bits.
  - **ODD** – Transmits an odd number of bits.
  - **MARK** – Marks the first bit of each 8-bit ASCII character.
  - **SPACE** – Clears the first bit of each 8-bit ASCII character.
16. To save your changes, click **OK**. The changes will go into effect when the next communications session is initiated.

### 4.1.10 ZMODEM Settings

You can view or modify the settings that are unique to the ZMODEM interface by choosing the ZMODEM tab within the edit channel window. The ZMODEM tab enables you to select the file transfer mode, enter the parameters for transmitting messages, specify the transmission baud rate and byte size, and select the level of error detection and parity for the transmission.

1. In the edit channel window, click the ZMODEM tab.

Figure 4.1-28 Edit Channel Window: ZMODEM Tab



2. In the FILE TRANSFER box, select one of the TRANSFER MODE option buttons to specify the mode of file transfer:

- **BATCH** – Transfers one or more messages per file depending on the variable(s) included in the file name of each message. For information on variables, see [Step 4](#).
- **MULTIPLE** – Transfers one message per file.

---

**NOTE:** All administrative messages sent by ECPN (i.e., message reports and 824 or 997 acknowledgements) are transferred as one message per file, regardless of the TRANSFER mode set.

---

3. Select or clear the TRANSMIT ONLY check box to set the communication mode for the channel. When this check box is selected, the channel sends messages but does not receive them. When this check box is cleared, the channel sends and receives messages.

The primary reason to activate transmit-only mode is to delete queued messages after a Continuity of Operations (COOP). For example: If DMC-Ogden assumes communications for DMC-Columbus, DMC-Ogden should activate all of its Columbus channels in the communications channel database and all of its Columbus routes in the routing database. When DMC-Columbus returns online, DMC-Ogden should configure all of the Columbus channels to transmit only, which causes these channels to transmit all queued messages but not receive any new messages. Once the queues have cleared, DMC-Ogden should deactivate all channels and routes that it assumed from DMC-Columbus.

Note that you can set the transmit-only function for one or more channels by selecting **Edit > Set Xmit-Only** from the menu bar in the Communications Manager.

For more information on archiving COOP data after assuming communications for another site or restoring this data (at the site for which the COOP was performed), see [Appendix I](#).

4. In the FILE NAME field, enter a name for all files to be transmitted by the channel. For information on entering a file name, see [Step 6](#) in *To view and edit FTP transfer parameters*.
5. In the DIAL TIMEOUT field, enter the time (in seconds) to wait before determining that a connection cannot be established.
6. In the XMIT PACKET SIZE field, enter the size of a transmitted data packet.
7. In the RECV PACKET SIZE field, enter the expected size of a received data packet.
8. In the RECV EOP field, enter the value for the expected receive end-of-packet character (decimal value).
9. In the ESCAPE CHAR field, enter the value for the escape character during “connect” (decimal ASCII value).

10. In the **WINDOW SIZE** field, enter the number of windows to use in the sliding windows protocol.
11. In the **BYTE LIMIT** field, enter the maximum number of bytes that may be processed before the transmission or receipt of a message is aborted. The default value is 0, indicating that messages are transmitted or received regardless of size.
12. In the **BAUD** field, click the list box to display a list of baud rates for transmission over the channel. Select an entry from the list.
13. In the **BYTE SIZE** field, click the list box to display a list of the number of bits per character for serial communications. ASCII and binary data types default to 8. Select an entry from the list.
14. In the **BLOCK CHECK** field, click the list box to display a list of block check values. The value used indicates the level of error detection provided by ZMODEM. Type 1 and **BLANK FREE** catch most errors. Types 2 and 3 specify more rigorous checking, but at the cost of higher overhead. Select an entry from the list.
15. In the **PARITY** field, click the list box to display a parity list. From the list, select the parity for transmissions over the channel. The choices are as follows:
  - **NONE** – No error checking occurs.
  - **EVEN** – Transmits an even number of bits.
  - **ODD** – Transmits an odd number of bits.
  - **MARK** – Marks the first bit of each 8-bit ASCII character.
  - **SPACE** – Clears the first bit of each 8-bit ASCII character.
16. To save your changes, click **OK**. The changes will go into effect when the next communications session is initiated.



### 4.1.11 Command File for CLEO, Kermit, and ZMODEM Channels

During dial-up communications (i.e., CLEO, Kermit, or ZMODEM), ECPN connects to a remote machine via modem for file transfers. The communication process between the systems is governed by a script containing a series of commands. The script includes commands for a variety of processes, including dialing the remote host and sending and receiving files. The **SCRIPT** button in the edit channel window enables you to edit the command file for CLEO, Kermit, and ZMODEM channels.

---

#### NOTES ON COMMAND FILES

---

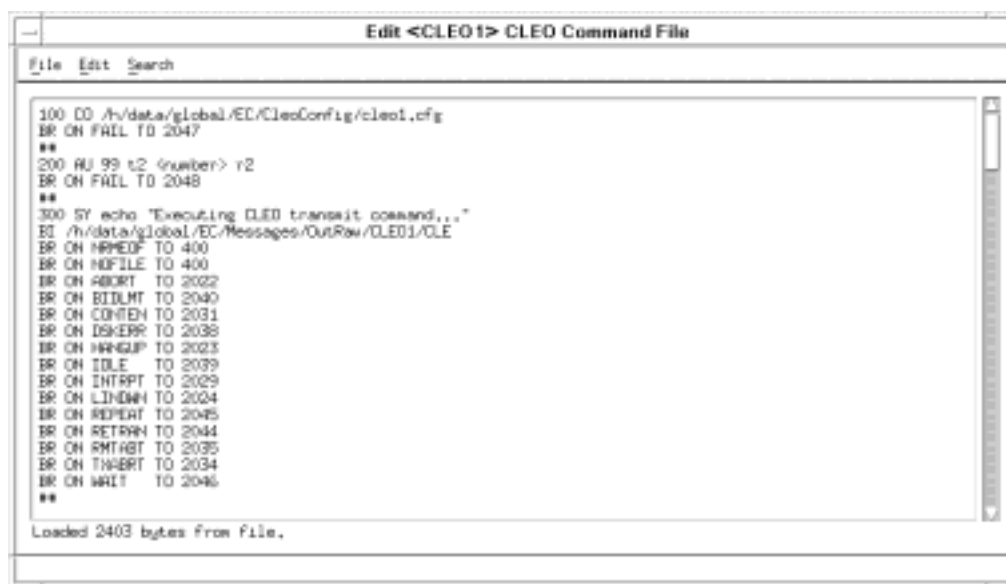
The CLEO, Kermit, and ZMODEM scripts should not be confused with the configuration (.cfg or .ini) files for these interfaces. When you edit a channel using the **Communications Manager** option, ECPN automatically updates the channel's .cfg or .ini files. You should *not* manually edit a channel's .cfg or .ini files. Any changes you manually make to the .cfg or .ini files will be lost when you turn on the channel.

You should *not* edit the *send* section of a script or any macros (e.g., send-directory, receive-directory, transmit-files-list) that a script invokes. Changing these elements produces unexpected results.

---

1. In the edit channel window, click **SCRIPT**. The edit channel command file window appears, displaying the name of the selected channel in the title bar and the contents of the command file in the window area.

Figure 4.1-29 Edit Channel Command File Window



2. Edit the command file as desired.

## 4.2 Communications Status

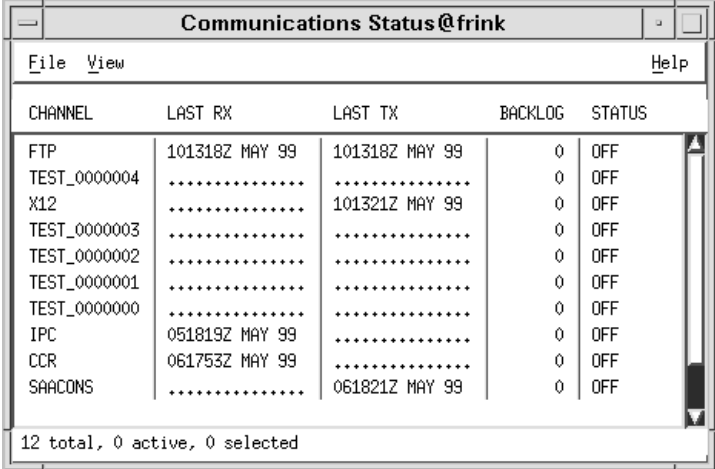
The Communications Status option enables you to view the current status of all ECPN communications channels. Using this option, you can do the following:

- View the [status](#) of a channel
- View the [session log](#) for a channel
- View the [incoming channel log](#) for a channel
- View the [outgoing channel log](#) for a channel
- View the outgoing channel queue for an or [non-email](#) or [email](#) channel

### To view the status of a channel

Select Communications > Communications Status. The Communications Status window appears.

Figure 4.2-1 Communications Status Window



The screenshot shows a window titled "Communications Status@frink". It has a menu bar with "File", "View", and "Help". Below the menu bar is a table with the following columns: CHANNEL, LAST RX, LAST TX, BACKLOG, and STATUS. The table contains 12 rows of data. At the bottom of the window, it says "12 total, 0 active, 0 selected".

CHANNEL	LAST RX	LAST TX	BACKLOG	STATUS
FTP	101318Z MAY 99	101318Z MAY 99	0	OFF
TEST_0000004	.....	.....	0	OFF
X12	.....	101321Z MAY 99	0	OFF
TEST_0000003	.....	.....	0	OFF
TEST_0000002	.....	.....	0	OFF
TEST_0000001	.....	.....	0	OFF
TEST_0000000	.....	.....	0	OFF
IPC	051819Z MAY 99	.....	0	OFF
CCR	061753Z MAY 99	.....	0	OFF
SACONS	.....	061821Z MAY 99	0	OFF

12 total, 0 active, 0 selected

The Communications Status window displays an entry under the following column headings for each channel:

#### CHANNEL

Name of the channel.

**NOTE:** If a previous communications channel database is restored (as described in [Section 4.7](#) of the *System Administrator's Guide for Electronic Commerce Processing Node*), ECPN removes the values in the LAST RX and LAST TX fields, because they may no longer be accurate. These values are updated when ECPN receives or transmits a new message.

**LAST RX**

Last time the channel received a message.

**LAST TX**

Last time the channel transmitted a message.

**BACKLOG**

Number of the channel's messages that are either pending transmission in the outgoing channel queues or awaiting processing by the translator or router.

**STATUS**

Status of the channel. Data in the window is color-coded to reflect the status as described in [Table 4.2-1](#).

*Table 4.2-1 Channel Status Indicators*

Status	Color	Definition
BUSY	Green	The channel is receiving or transmitting data.
DOWN	Red	The channel, while turned ON, has died.
IDLE	Yellow	The channel is in between cycles. It is active, but currently is neither receiving nor transmitting data.
OFF	White	The channel has been manually turned off.

If a channel has not recently received or transmitted a message, it may be experiencing a problem that requires attention.

**To view the session log for a channel**

In the Communications Status window, select a channel and then select View > Session Log. The session log window ([Figure 4.1-5](#)) appears. For instructions on using this window, see *To view a session log for a channel* in [Section 4.1](#).

**To view the incoming channel log for a channel**

In the Communications Status window, select a channel and then select **View > Channel Log – Incoming**. The In Channel Log Viewer ([Figure 4.1-6](#)) appears. For instructions on using this window, see *To view the incoming channel log for a channel* in [Section 4.1](#).

**To view the outgoing channel log for a channel**

In the Communications Status window, select a channel and then select **View > Channel Log – Outgoing**. The Out Channel Log Viewer ([Figure 4.1-10](#)) appears. For instructions on using this window, see *To view the outgoing channel log for a channel* in [Section 4.1](#).

**To view the outgoing message queue for a non-email channel**

In the Communications Status window, select a non-email channel and then select **View > Channel Queue – Outgoing**. The Out Channel Queue Viewer ([Figure 4.1-12](#)) appears. For instructions on using this window, see *To view the outgoing message queue for a non-email channel* in [Section 4.1](#).

**To view the outgoing message queue for all email channels**

In the Communications Status window, select an email channel and then select **View > Channel Queue – Outgoing**. The Outgoing Email Queues window ([Figure 3.3-1](#)) appears. For instructions on using this window, see *To view queues of outgoing email messages* in [Section 3.3](#).

This page has been intentionally left blank.

## Section 5

# Databases

---

The options on the **Databases** menu enable you to configure the routing database and trading partner database as well as view the message database. |

The **Databases** menu provides the following options:

### **Routing DB**

To automatically route specific types of incoming messages to selected destinations.  
([Section 5.1](#))

### **Trading Partner DB**

To manage a database of trading partners that have been approved to participate in electronic commerce. ([Section 5.2](#))

### **Message DB**

To search for and retrieve message data from the Relational Database Management System (RDBMS). ([Section 5.3](#))

## 5.1 Routing DB

Use the Routing DB option to establish routes for distributing incoming messages to selected destinations (channels or email addresses). When a message enters the system and is processed, it is checked against the active entries in the routing database for a match. If there is a match of the source criteria, the message is transmitted to the destinations specified by each matching routing database entry.

The routing database routes all message types except for system-generated messages (traffic reports and 824/997 acknowledgements) and child messages (SAACONS 838s and EDA index files).

Using the Routing DB option, you can do the following:

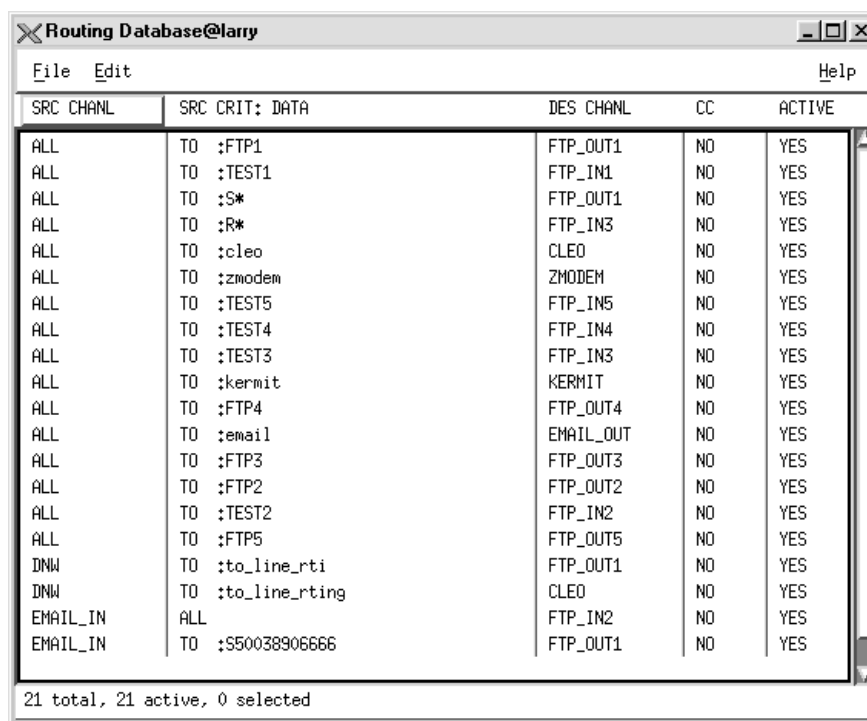
- [View](#) the routing database
- [Add](#) an entry to the routing database
- [Edit](#) an entry in the routing database
- [Delete](#) an entry from the routing database



## To view the routing database

Select Databases > Routing DB. The Routing Database window appears.

Figure 5.1-1 Routing Database Window



The screenshot shows a window titled "Routing Database@larry" with a menu bar (File, Edit, Help) and a table of routing entries. The table has five columns: SRC CHANL, SRC CRIT: DATA, DES CHANL, CC, and ACTIVE. There are 21 rows of data, all with "YES" in the ACTIVE column. At the bottom of the window, it says "21 total, 21 active, 0 selected".

SRC CHANL	SRC CRIT: DATA	DES CHANL	CC	ACTIVE
ALL	TO :FTP1	FTP_OUT1	NO	YES
ALL	TO :TEST1	FTP_IN1	NO	YES
ALL	TO :S*	FTP_OUT1	NO	YES
ALL	TO :R*	FTP_IN3	NO	YES
ALL	TO :cleo	CLEO	NO	YES
ALL	TO :zmodem	ZMODEM	NO	YES
ALL	TO :TEST5	FTP_IN5	NO	YES
ALL	TO :TEST4	FTP_IN4	NO	YES
ALL	TO :TEST3	FTP_IN3	NO	YES
ALL	TO :kermit	KERMIT	NO	YES
ALL	TO :FTP4	FTP_OUT4	NO	YES
ALL	TO :email	EMAIL_OUT	NO	YES
ALL	TO :FTP3	FTP_OUT3	NO	YES
ALL	TO :FTP2	FTP_OUT2	NO	YES
ALL	TO :TEST2	FTP_IN2	NO	YES
ALL	TO :FTP5	FTP_OUT5	NO	YES
DNW	TO :to_line_rti	FTP_OUT1	NO	YES
DNW	TO :to_line_rting	CLEO	NO	YES
EMAIL_IN	ALL	FTP_IN2	NO	YES
EMAIL_IN	TO :S50038906666	FTP_OUT1	NO	YES

21 total, 21 active, 0 selected

The Routing Database window displays information under the following column headings for each routing entry in the database.

### SRC CHANL

Channel that received the incoming message.

### SRC CRIT: DATA

Criteria used to determine the routing path.

### DES CHANL

Channel to which the incoming message should be routed.

**CC**

Secondary route (also known as a carbon copy route) indicator: YES or NO. A secondary route enables sites to receive carbon copies of messages processed by ECPN, while still ensuring the primary recipient receives the messages (via a primary route).

**ACTIVE**

Routing status indicator: YES or NO. When an entry is set to YES, the system checks each incoming message against the entry's criteria to determine whether the message should be routed to the specified destinations. When an entry is set to NO, the system does not check each incoming message against the entry's criteria.

Note that a routing entry's status can be changed in one of two ways:

- By selecting the entry and then selecting **Edit > Activate** or **Edit > Deactivate** in the **Routing Database** window (Figure 5.1-1)
- By selecting or clearing the **ACTIVE** check box in the **Add Routing** window (Figure 5.1-2) or the **Edit Routing** window (not shown) for the entry

**To add an entry to the routing database**

Entries in the routing database are classified as either primary or secondary. Each message that ECPN processes must have at least one primary route, and it may have one or more secondary routes as well. Primary routes designate the primary recipients of incoming messages, whereas secondary routes designate recipients that wish to receive carbon copies or courtesy copies of messages. The system checks each message to ensure that it has at least one primary route. If a message fails this check and cannot be transmitted via a primary route, it is placed in the error queue (described in Section 3.2) and tagged with the error **No Primary Route Available**; however, it is still transmitted to any secondary routes specified for the message.

To determine whether a message was routed by a primary or secondary route, examine the **Action Summary** field of the **JDS Viewer** (Figure 3.1-4) for a message. The action **ROUTED** indicates that the message was routed by a primary route, and the action **CC ROUTED** indicates that the message was routed by a secondary route.

To illustrate primary and secondary routing, suppose that the Army's Procurement Automated Data and Document System (PADDS), which transmits all of its transactions to trading partners (via VANs), is given a new requirement to submit all 850s (purchase orders) to Mechanization of Contract Administration Services (MOCAS). To accommodate this new requirement and still deliver all transactions to the trading partners, you keep the routes to the trading partners as primary routes and create a new secondary route destined for MOCAS, with the GS01 routing criteria set to PO.

1. In the Routing Database window, select **Edit > Add**. The Add Routing window appears.

Figure 5.1-2 Add Routing Window

This window enables you to set routing criteria for incoming message traffic. Duplicate entries and entries whose source and destination is the same are allowed *only* if one of the entries is a primary route and the other entry is a secondary route.

2. Click the drop-down list box by the **SOURCE CHANNEL** field to display a list of valid communications channels. Select the channel that will receive the messages to be routed.
3. Click the drop-down list box by the **DESTINATION CHANNEL** field to display a list of valid communications channels. Select the channel to send the messages that match the routing criteria.
4. Select or clear the **ACTIVE** check box to activate or deactivate routing. Note that this option serves the same purpose as the **ACTIVATE** and **DEACTIVATE** options on the pull-down menu of the **Routing Database** window. When this option is selected, messages are checked and routed based on the criteria for the entry. When this option is cleared, messages are not checked or routed based on the criteria for the entry.
5. Select or clear the **CASE SENSITIVE** check box to activate or deactivate case sensitivity for the **FILE/VAN NAME PATTERN** field. When this option is selected, matches occur *only* if the capitalization of the entry in the **FILE/VAN NAME PATTERN** field is identical to the capitalization of the pattern in the message's file name.
6. Select or clear the **CARBON COPY** check box to classify a route as a secondary or a primary route. If the option is selected, the route is classified as a secondary route (also known as a carbon copy route). If the option is cleared, the route is classified as a primary route. A secondary route enables sites to receive carbon copies of messages processed by ECPN, while still ensuring the primary recipient receives the messages (via a primary route).

7. To specify the routing criteria, select one of the **CRITERIA** option buttons:

- **ISA/GS TO** – To specify that the system route only those incoming messages *addressed to* a certain site, enter the value that appears in the ISA08 or GS03 field of the original message in the **ISA/GS TO** field. This field accepts wildcard characters (as described in [Section 1.3](#)).

Note that in order for a message recipient to be able to send reply messages to the message originator, you must also add a route to the routing database for the GS02 field of the original message. The system automatically checks outgoing messages for a valid reply route if the **CHECK REPLY ROUTE AVAILABLE** check box is selected in the edit channel window (as described in [Section 4.1.1](#)). If the system is unable to detect a valid reply route for the message, the message is removed from the outgoing channel queue or outgoing email queue and placed in the error queue.

- **FILE/VAN NAME PATTERN** – Used for two types of routing:
  - To specify that the system route only those incoming messages that contain a certain file name pattern (e.g., the same prefix, suffix, or middle characters), enter that pattern in the **FILE/VAN NAME PATTERN** field.

Note that the entry in the **FILE/VAN NAME PATTERN** field must contain wildcard character(s) to represent the part of the file name not included in the file pattern. For example, if you want to specify all messages with a file *prefix* of abc, you must enter **abc\*** (not **abc** alone) in the **FILE/VAN NAME PATTERN** field. Likewise, if you want to specify all messages with a file *suffix* of xyz, you must enter **\*xyz** in the **FILE/VAN NAME PATTERN** field. For additional information regarding wildcard characters, see [Section 1.3](#).

- To specify that the system route only those incoming messages destined for a certain VAN, enter the VAN identifier in the **FILE/VAN NAME PATTERN** field.

Routing by VAN identifier works as follows: First, ECPN compares the incoming message's GS03 (Application Receiver Code) to the entries in the trading partner database (TPDB) and obtains the VAN identifier associated with the GS03. ECPN then compares the VAN identifier to the entries in the routing database and obtains a route for the VAN. This routing method saves time, because you only have to enter one route per VAN, rather than entering a route for each trading partner supported by each VAN.

- **GS01 (Functional Identifier Code)** – To specify that the system route only those incoming messages of a certain X12 transaction type, click **GS 01 LIST**, and in the dialog box that appears, select one or more transaction types by which to route. (A transaction type is the value that appears in the GS01 field of the original message.) You may select up to 10 transaction types. Routing by GS01 enables you to route individual X12 GS segments. For example, you can route all purchase orders (850s) and purchase order change requests (860s) to a channel.
  - **ALL** – To specify that the system route *all* incoming messages. If this option is selected, any information in the preceding three fields is not used.
8. To add an entry to the routing table, click either **OK** or **APPLY**. Clicking **OK** closes the Add Routing window, but clicking **APPLY** leaves the Add Routing window open so you can add more routing entries.

An incoming message is automatically routed to the channel entered in the **DESTINATION CHANNEL** field if the following are true:

- The message matches the routing criteria entered in the **SOURCE CHANNEL** field *and* the **CRITERIA** box.
- The **ACTIVE** check box is selected.

### To edit an entry in the routing database

1. In the Routing Database window, double-click the entry, or click it once and then select **Edit > Edit**. The Edit Routing window appears. This window has the same format as the Add Routing window ([Figure 5.1-2](#)).
2. For instructions on editing the entry, see *To add an entry to the routing database*.

### To delete an entry from the routing database

1. In the Routing Database window, select each entry to be deleted and then select **Edit > Delete**. A **WARNING** window appears, asking you to confirm the deletion.
2. Click **OK**.

## 5.2 Trading Partner DB

The Trading Partner DB option enables you to manage a database of trading partners that have been approved to participate in electronic commerce by the Central Contractor Registration (CCR) office. Trading partners can be entered into the database either manually or automatically.

For ECPN to automatically enter trading partners in the trading partner database, you must have a CCR type channel in the communications channel database and a routing entry for incoming messages from the CCR. (See [Section 4.1](#) for information on adding a channel to the communications channel database and [Section 5.1](#) for information on establishing routes for incoming messages.) Once a trading partner has been approved to participate in electronic commerce, the CCR forwards the trading partner's ANSI X12 838 (Trading Partner Profile) 3040 Version transaction set to the ECPN. This 838 transaction set contains such information as the company name, address, point of contact, and contractor identification numbers (e.g., CAGE, DUNS). ECPN automatically pulls this information from the 838 transaction set and stores it in the trading partner database.

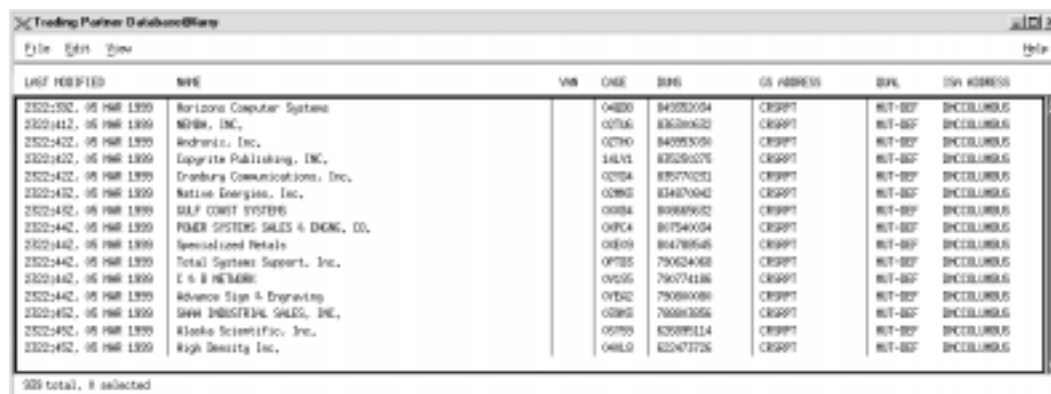
Using the Trading Partner DB option you can do the following:

- [View](#) the trading partner database
- [Add](#) a trading partner to the database manually
- [Edit](#) an existing trading partner entry
- [Delete](#) one or more trading partners from the database
- [View](#) the transaction history of a trading partner

## To view the trading partner database

Select Databases > Trading Partner DB. The Trading Partner Database window appears.

Figure 5.2-1 Trading Partner Database Window



LAST MODIFIED	NAME	VAN	CAGE	DUNS	GS ADDRESS	BPN	ISN ADDRESS
2322:432, 05 MAR 1999	Horizon Computer Systems		04800	843032004	CR99T	NUT-BGF	INCELLUMUS
2322:412, 05 MAR 1999	NORW, INC.		02706	836286032	CR99T	NUT-BGF	INCELLUMUS
2322:432, 05 MAR 1999	Andromis, Inc.		02790	840993006	CR99T	NUT-BGF	INCELLUMUS
2322:432, 05 MAR 1999	Copright Publishing, INC.		141V1	835290076	CR99T	NUT-BGF	INCELLUMUS
2322:432, 05 MAR 1999	Draburg Communications, Inc.		02704	875770201	CR99T	NUT-BGF	INCELLUMUS
2322:432, 05 MAR 1999	Native Energy, Inc.		02885	834370642	CR99T	NUT-BGF	INCELLUMUS
2322:432, 05 MAR 1999	SILF COMST SYSTEMS		03084	809889032	CR99T	NUT-BGF	INCELLUMUS
2322:442, 05 MAR 1999	POWER SYSTEMS SALES & ENGINE, CO.		047C4	807540004	CR99T	NUT-BGF	INCELLUMUS
2322:442, 05 MAR 1999	Specialized Retail		03059	804780646	CR99T	NUT-BGF	INCELLUMUS
2322:442, 05 MAR 1999	Total Systems Support, Inc.		07785	790524068	CR99T	NUT-BGF	INCELLUMUS
2322:442, 05 MAR 1999	E & B NETWORK		02555	790774186	CR99T	NUT-BGF	INCELLUMUS
2322:442, 05 MAR 1999	Advance Sign & Engraving		07542	790880080	CR99T	NUT-BGF	INCELLUMUS
2322:452, 05 MAR 1999	SAW INDUSTRIAL SALES, INC.		03885	766863656	CR99T	NUT-BGF	INCELLUMUS
2322:452, 05 MAR 1999	Klaake Scientific, Inc.		05799	825889114	CR99T	NUT-BGF	INCELLUMUS
2322:452, 05 MAR 1999	High Density Inc.		04810	822473726	CR99T	NUT-BGF	INCELLUMUS

928 total, 8 selected

This window displays an entry under the following column headings for each trading partner in the database:

### LAST MODIFIED

Date and time of the most recent modification to the TPDB entry. For a new TPDB entry, indicates the date and time the entry was added.

### NAME

Trading partner name.

### VAN

Service provider (commercial only). Code of the VAN providing connectivity to the government for the trading partner.

### CAGE

Commercial and Government Entity code. Unique addressing number identifying a commercial contractor authorized to do business with the government.

### DUNS

Data Universal Numbering System code. Unique addressing number assigned by Dun and Bradstreet.

### GS ADDRESS

GS application address.

**QUAL**

ISA address qualifier.

**ISA ADDRESS**

ISA address.

**To manually add a trading partner**

1. In the Trading Partner Database window, select Edit > Add. The Add Trading Partner window appears.

*Figure 5.2-2 Add Trading Partner Window*

At the top of the window are two tabs: **GENERAL** and **POC/NOTES**.

- a. In the **NAME** field, enter the trading partner name.
- b. (Commercial only) In the **VAN** field, enter the VAN code for the trading partner's service provider.
- c. In the **CAGE #** field, enter the unique CAGE number for the trading partner.
- d. In the **DUNS #** field, enter the unique DUNS number for the trading partner.



- e. In the DODAAC field, enter the Department of Defense Address Activity Code.
  - f. In the GS ADDRESS field, enter the GS application address for the trading partner.
  - g. Click the list box next to the ISA QUALIFIER field, and select the appropriate qualifier.
  - h. In the ISA ADDRESS field, enter the ISA address ID for the trading partner.
2. Click the POC/NOTES tab.
    - a. In the POC text box, enter point of contact information for the trading partner, such as names, telephone numbers, and addresses.
    - b. In the NOTES text box, enter any notes you wish to record about the trading partner.
  3. To save the settings in the Add Trading Partner window, click OK.

### **To edit an existing trading partner**

1. In the Trading Partner Database window, double-click the trading partner entry that you wish to edit, or click it once and then select **Edit > Edit**. The **Edit Trading Partner** window appears. This window has the same format as the **Add Trading Partner** window.
2. For instructions on editing the trading partner entry, see [To manually add a trading partner](#).

### **To delete one or more trading partners**

1. In the Trading Partner Database window, select each trading partner and then select **Edit > Delete**. A **WARNING** window appears, asking you to confirm the deletion.
2. Click **OK** to remove each trading partner from the database.

## To view the transaction history of a trading partner

1. In the Trading Partner Database window, select a trading partner and then select View > View Trans History. The Transaction History window appears.

Figure 5.2-3 Transaction History

The screenshot shows the 'Transaction Object Viewer' window. It has three main sections: 'TRANSACTION VIEWED', 'TRANSACTION SUMMARY', and 'TRANSACTION LIST'.

**TRANSACTION VIEWED:** 1 OF 2

ISA\*06\* \*00\* \*ZZ\*CCRICOLUMBUS \*ZZ\*FEDGATEWAYS \*9801  
 GS\*TD\*CCRI000\*CCRRPT\*980202\*1214\*000077621\*X\*003070F838\_0  
 ST\*838\*0000000001  
 BTP\*00\*1\*980202\*1214\*TP\*35  
 LX\*1  
 PLA\*WQ\*KK\*980128  
 N1\*KK\*Root International Distributors, Inc.\*1\*002549959  
 N3\*6625 N. Anderson Road  
 N4\*Tampa\*FL\*33634  
 N9\*W7\*0AHS1  
 PER\*CE\*David W. Root\*TE\*(813)885-2645  
 PER\*CE\*David W. Root\*EM\*dave@rootintl.com  
 PER\*IC\*David W. Root\*TE\*(813)885-2645  
 DTM\*007\*980128\*070100\*\*19

**TRANSACTION SUMMARY**

Transaction Description: Entry <002549959> added by system

Modification Summary:  
 NAME changed from <empty> to Root International Distributors, Inc.  
 DUNS # changed from <empty> to 002549959  
 CAGE # changed from <empty> to 0AHS1  
 ISA QUALIFIER changed from <empty> to ZZ  
 ISA ADDRESS changed from <empty> to CCRICOLUMBUS  
 GS ADDRESS changed from <empty> to CCRI000

**TRANSACTION LIST**

TRANSACTION	TIME	ID	MSN
AUTO ADD	042017:54Z MAR	SYSTEM	500000007/19990304
UPDATE	291501:28Z MAR	mbunar@labatts	

EXIT

The TRANSACTION VIEWED box at the top of the window displays the message associated with the automatic transaction that is selected in the TRANSACTION LIST box at the bottom of the window. For example, if you select an AUTO ADD transaction in the TRANSACTION LIST box, the TRANSACTION VIEWED box displays the 838 transaction sent by the CCR to add the trading partner to the trading partner database.

Manual transactions (i.e., manually adding or editing a TPDB entry) do not have an associated message, and **No Associated Message** is displayed in the **TRANSACTION VIEWED** box.

The **TRANSACTION SUMMARY** box in the middle of the window displays additional information about the transaction. This summary information includes the following information:

- **Transaction Description** – Includes the DUNS number of the trading partner and a notation indicating whether the update was manual or system-generated
- **Modification Summary** – Lists the information that changed

The **TRANSACTION LIST** box displays the following information:

#### **TRANSACTION**

Type of action that occurred. Possible values are as follows: **ADD**, **UPDATE**, **AUTO ADD**, and **AUTO UPDATE**.

#### **TIME**

Time that the transaction occurred (ZULU).

#### **ID**

For manual transactions (either **ADD** or **UPDATE**), the user name and host who made the change to the database. For automatic transactions (either **AUTO ADD** or **AUTO UPDATE**), **SYSTEM**.

#### **MSN**

Message sequence number (MSN) associated with the automatic transaction. The MSN has the format **SNNNNNNNN/YYMMDD** (explained in [Table 1.1-2](#)). For manual transactions, this column is blank.

2. To close this window, click **EXIT**.

## 5.3 Message DB

The message database contains important data about each message *received* by ECPN. The Message DB option enables you to search the message database for information about a specific message based on certain criteria that you already know about that message.

For example, suppose that an AIS agent sent a Purchase Order (PO) to a trading partner but has not yet received a 997 acknowledgment. The AIS agent asks you to verify that ECPN sent the PO to the trading partner. Using the Message DB option, you may search on the PO number to find the message in question. Once found, you may look at the message's JDS to determine if it was sent by ECPN to the trading partner's VAN.

Using the Message DB option, you can do the following:

- [Retrieve](#) message data from the message database
- [View](#) the JDS message viewer
- [View](#) message transaction data
- View a [list of dates](#) for which message data is stored in the database
- [Activate](#) another Message Database window
- [Close](#) a Message Database window
- [Exit](#) the Message Database option

## To retrieve message data from the message database

1. Select Databases > Message DB. The Message Database window appears. Note that you can open more than one query window at the same time, and the windows are numbered according to the order in which they are opened.

Figure 5.3-1 Message Database Window

The screenshot shows a window titled "Message Database #1". It is divided into two main sections. The top section, labeled "Search Control Box", contains several input fields for filtering messages: MSG#, DSA CNTL #, DSA FROM, DSA TO, SS CNTL #, SS FROM, SS TO, ST CNTL #, ST TYPE, CHANNEL, PO #, SOLET #, and FILE NAME. Below these fields are buttons for "Clear All", "Date Range: Start [10/11/1999] Stop [10/11/1999]", "Page Up/Down", and "Begin Search". The bottom section, labeled "Search Results Table", features a "Record Count" field and a "View Transactions" button. At the very bottom of the window are three buttons: "New Query Window", "Close Window", and "Exit".

This window is divided into two boxes. The top box, or the *search control box*, contains fields and buttons that enable you to perform a database search. The bottom box, or the *search results table*, displays the results of a database search. Note that until a search is initiated, the search results table appears blank.

The window boxes can be resized or completely hidden from view. To resize the boxes, click the small square icon (on the right end of the divider line in the middle of the window) and drag it up or down. To hide a box from view or restore a hidden box, use the arrow buttons. Scroll bars automatically appear for each box when needed.

2. You may use the search control fields as filters to reduce the time required to search the database. To narrow your search, enter data in one or more of the following search control fields. Only messages meeting these criteria are retrieved. Note that if you leave the search control fields blank, the system retrieves *all* messages in the database.

**MSN**

Message sequence number. The MSN has the format SNNNNNNNN/YYYMMDD, explained in [Table 1.1-2](#). You do not have to enter the complete MSN to search for a message in the database: You can search either by the site ID, sequence number (without leading zeros), or date. If you search by date, you must enter a slash before the date (e.g., /19990216).

**ISA CNTL #**

Interchange control number. (Leading zeros are not required.)

**ISA FROM**

Interchange sender ID.

**ISA TO**

Interchange receiver ID.

**GS CNTL #**

Group control number. (Leading zeros are not required.)

**GS FROM**

Application sender's code.

**GS TO**

Application receiver's code.

**ST CNTL #**

Transaction set control number.

**ST TYPE**

Transaction set type.

**CHANNEL**

Channel over which the message was received.

**PO #**

Purchase order number.

**SOLIT #**

Solicitation number.

**FILE NAME**

Remote file name.

To further control the database search, wildcard characters may be entered in the following text fields: ISA FROM, ISA TO, GS FROM, GS TO, CHANNEL, ST CNTL #, ST TYPE, PO #, SOLIT #, and FILE NAME. (See [Section 1.3](#) for information on wildcard characters and their use.)

3. Enter the date range for which you wish to search the database as follows:
  - a. **Start** – When the **Message Database** window is opened, this field defaults to two days before the current day (based on ZULU time). Alternate dates may be entered using either the MM/DD/YYYY or the MM/DD/YY format. If the year portion of the entry is not entered, the current year is used. If left empty, the **Start** field defaults to the value entered in the **Stop** field (i.e., only one day is searched). To view a list of dates for which messages exist in the database, click the **Days On-Line** button (discussed later in this subsection).
  - b. **Stop** – When the **Message Database** window is opened, this field defaults to the current day (based on ZULU time). Alternate dates may be entered using either the MM/DD/YYYY or the MM/DD/YY format. If the year portion of the entry is not entered, the current year is used. If left empty, the **Stop** field defaults to the current day. To view a list of dates for which messages exist in the database, click the **Days On-Line** button (discussed later in this subsection).
4. To activate the search, click **Begin Search**. A **Working** window appears, stating that the search is in progress, and then the window disappears. Another **Working** window appears, listing the number of records being retrieved, and then disappears when the retrieval is complete. Both of these windows contain a **Cancel** button, allowing the search to be terminated at any time.

When the search is complete, the results appear in the search results table as shown in [Figure 5.3-2](#). If no matching records are found or if the date range includes tables that are not online, a **Search Error** window appears.

Figure 5.3-2 Message Database Window (With Search Results)

MSG:

ISM:  ISM FROM:  ISM TO:

GS:  GS FROM:  GS TO:

ST:  ST TYPE:  CHANNEL:

PO:  SOLE:  FILE NAME:

Clear All Date Range: Start  Stop  Days On-Line Begin Search

Record Count:

View Transactions

Reg. Seq. Num.	ISM Control #	ISM From	ISM To	GS Control #	GS From	GS To	ST Control #	ST Type	Purchase Order #	Selection #
00000001/19990117	115	system	ISF-SPS	014	system	ISF-SPS	1	SD4		
00000002/19990117	112	system	DMCILMBUS	013	91114170000	020000000000	1	SD4		000001020902
00000003/19990117	110	system	ISF-SPS	017	system	ISF-SPS	1	SD4		
00000004/19990117	114	system	DMCILMBUS	015	910473450000	020000000000	1	SD4		000001020902
00000005/19990117	117	system	ISF-SPS	018	system	ISF-SPS	1	SD4		
00000006/19990117	116	system	DMCILMBUS	016	910817820000	020000000000	1	SD4		000001020902
00000007/19990117	120	system	ISF-SPS	011	system	ISF-SPS	1	SD4		

New Query Window Close Window Exit

The database query pulls the records from the database that match *all* of the search criteria in the search control box and displays them in the search results table. The **RECORD COUNT** field displays the number of matching records.

The rows in the search results table are ordered by the MSN date and then the MSN eight-digit sequence number. The database records are displayed in a scrolling matrix. The **Msg Seq Num** field remains stationary when you scroll horizontally through the other columns.

5. To delete data from the search control fields in preparation for a new search, click **Clear All**. The entries in the search control fields disappear; however, the search results table does not change until a new search is completed (i.e., if you cancel a search while it is in progress, the search results table will continue to display the results from the last completed search).

### To view the JDS message viewer

In the Message Database window, double-click on the row of the message entry in the search results table that you wish to view. The **JDS Viewer** appears, displaying the message text and related data. To use this window, see *To view the JDS for a message* in [Section 3.1](#).

### To view message transaction data

1. In the Message Database window, select the row of the message entry in the search results table for which you wish to view transaction data, and then click **View Transactions**. The **Transactions** window appears, displaying the selected MSN in the title bar.

Figure 5.3-3 Transactions Window





This window is divided into two sections. The message data from the Message Database window is displayed at the top. The bottom section lists the following data for each of the selected message's transactions:

**Msg Seq Num**

Message sequence number.

**Transaction Code**

Type of transaction.

**Transaction DTG**

Date-time group (DTG) indicating when the transaction occurred.

**Channel**

Channel over which the message was received.

**Byte Count**

Number of bytes in the message.

**File Name**

Name of the file as received by ECPN.

2. Click **Close** to close the window and return to the Message Database window.

## **| To view a list of dates for which message data is stored in the database**

1. Click Days On-Line in the top box of the Message Database window. The Days On-Line window appears, displaying the dates for which message data currently exists in the database. The most recent date appears first.

*Figure 5.3-4 Days On-Line Window*



2. To copy a date to the Date Range fields in the Message Database window:
  - a. Select a date and then click and hold the right mouse button on the selected entry. A pop-up menu appears with two options: Copy to Start Date and Copy to Stop Date.
  - b. Drag the cursor to the desired entry and then release the mouse button. The selected date is copied to the appropriate field in the Message Database window.

Note that the Days On-Line windows are numbered. These numbers correspond to the numbers on the Message Database windows. There is one Days On-Line window for each Message Database window. Using the date copy feature copies the date to the corresponding Message Database window only.

3. To close the Days On-Line window, click Close.

### **To activate another Message Database window**

In the Message Database window, click **New Query Window**. An additional Message Database window appears, allowing you to perform another independent search. Note that multiple Message Database windows may be open at the same time.

### **To close a Message Database window**

1. In the Message Database window, click **Close Window**.
2. If only one Message Database window is open, closing it exits you from the Message Database option. A confirmation window appears, asking if you really want to exit. Click **OK** to exit. If multiple Message Database windows are open, the window from which you selected **Close Window** closes without notice. All other windows remain open.

### **To exit the Message Database option**

In the Message Database window, click **Exit**. If only one Message Database window is open, it closes. If multiple Message Database windows are open, a confirmation window appears, stating the number of ECPN database search windows that are active and asking if you want to exit. Click **OK** to close all windows.

This page has been intentionally left blank.

## Section 6

# Alerts

---

The options on the Alerts menu enable you to monitor and act upon system-generated alerts.

The Alerts menu provides the following options:

### **Alert Log**

To view and acknowledge a log of system-generated alerts. ([Section 6.1](#))

### **Alert Display Filter**

To specify how you should be notified of alerts within a specific alert class. ([Section 6.2](#))

### **Alert Notification DB**

To create notification actions for specific alerts. ([Section 6.3](#))

### **Alert Notification Message**

To modify the email notification message. ([Section 6.4](#))

## 6.1 Alert Log

The Alert Log option enables you to view and acknowledge ECPN incoming alerts. The alert log contains each alert generated by ECPN. Each alert remains in the log until the log reaches its capacity of 2,500 alerts. At that time, the oldest alert is overwritten by the newest.

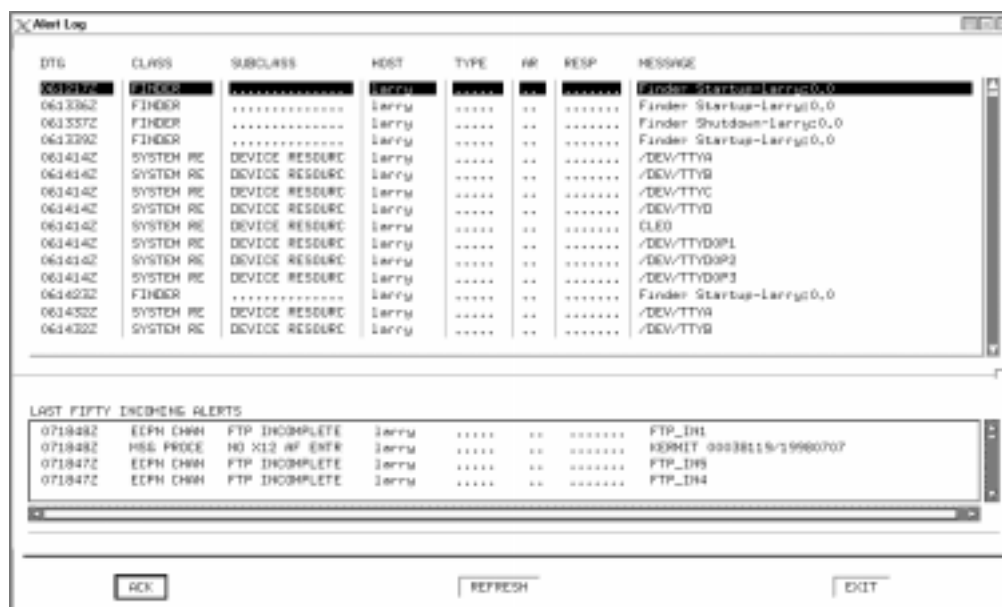
Using the Alert Log option, you can do the following:

- [View](#) the alert log
- [Acknowledge](#) an alert

### To view the alert log

Select Alerts > Alert Log. The Alert Log window appears.

Figure 6.1-1 Alert Log Window



The top box in this window lists the last 2,500 incoming alerts, beginning with the oldest alert and ending with the newest. The bottom box lists only the last 50 incoming alerts, with the most recent alert listed first. The purpose of the bottom box is to allow you to find a recent alert without having to scroll through hundreds of entries. To resize the boxes, click the small square icon (on the right end of the divider line in the middle of the window) and drag it up or down.

The Alert Log window displays an entry under the following column headings for each alert in the log.

**DTG**

Date-time group when the alert was sent.

**CLASS**

Alert class; either COMMS ALERT, ECPN RESOURCES, ECPN CHANNELS, MSG PROCESSING, SYSTEM RESOURCES, or ORACLE.

**SUBCLASS**

Alert type, a subcategory of the alert class. See [Appendix B](#) for a list of the alert types.

**HOST**

Originating host of the alert.

**TYPE**

Type of alert. INT indicates an alert that will interrupt with an alert window. NOINT indicates a non-interrupting alert.

**AR**

This field remains blank at this time.

**RESP**

Response field displays ACK if the entry was acknowledged; remains blank if unacknowledged.

**MESSAGE**

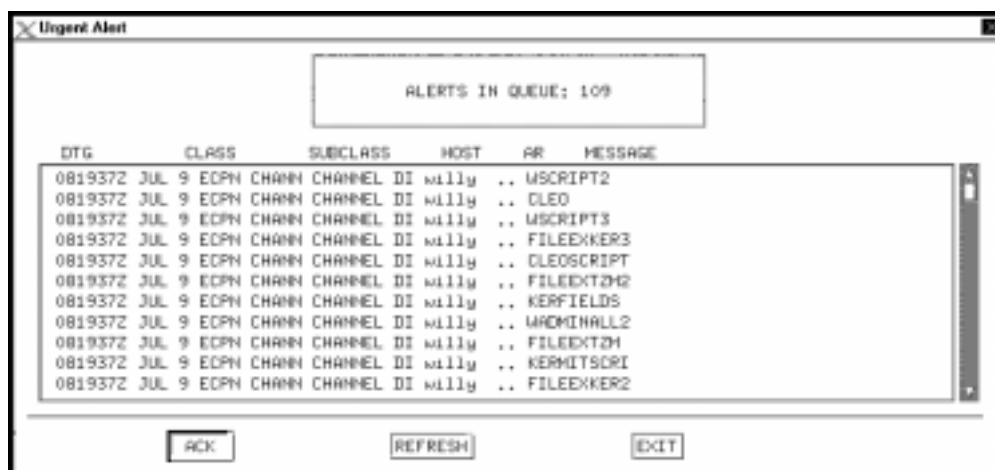
A 40-character summary of the alert generated by the system.

## To acknowledge an alert

You may acknowledge an alert in one of three windows:

- The Alert Log window.
  - The Urgent Alert window that automatically appears on top of any open windows on the display when an urgent alert occurs.
  - The Non-Urgent Alert window that appears when you click the flashing icon at the left corner of the main menu bar. (The icon flashes yellow for no action alerts and red for action alerts.)
1. To acknowledge an alert in the Alert Log window, select the entry in either box of the window, and click ACK. ACK appears in the RESP column in both the top and bottom boxes. Note that if an alert is acknowledged in the Alert Log window, the alert is automatically removed from either the Urgent Alert window or the Non-Urgent Alert window.
  2. To acknowledge an alert in the Urgent Alert window, select the alert and click ACK.

Figure 6.1-2 Urgent Alert Window



The following actions occur:

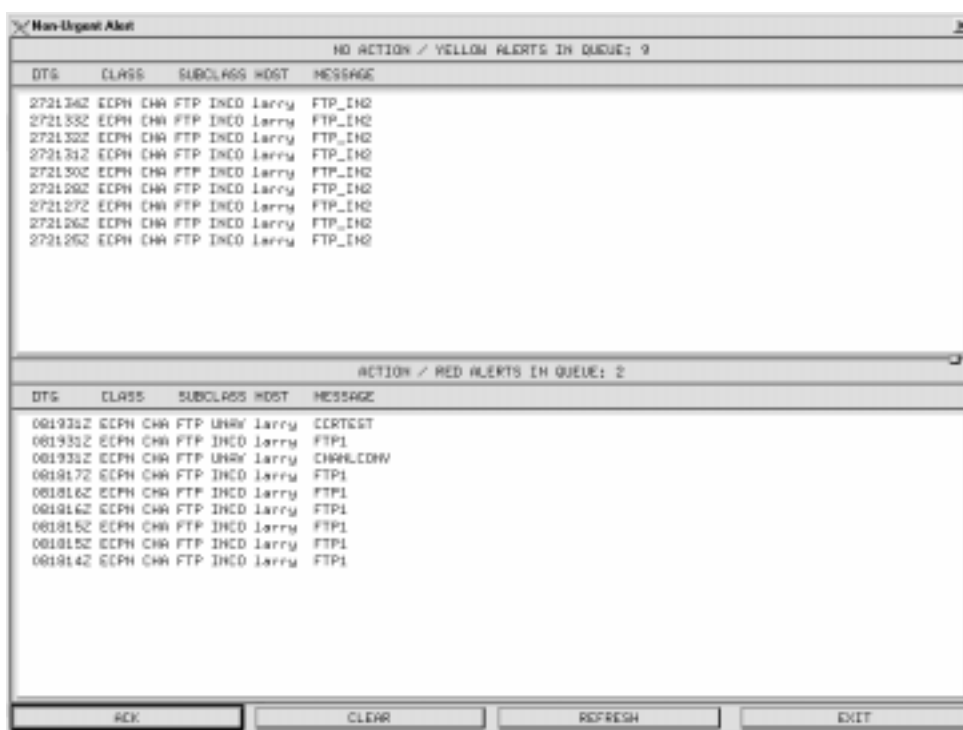
- The alert disappears from the window.
- The number in the ALERTS IN QUEUE field changes to reflect the number of alerts left in the queue.
- The alert's RESP field in the Alert Log window displays ACK.



If you close the Urgent Alert window without acknowledging all of its alerts, a warning window will appear, stating that there are urgent alert(s) remaining and asking if you wish to exit anyway.

3. To acknowledge an alert in the Non-Urgent Alert window:
  - a. Double-click the flashing icon at the left corner of the main menu bar. The Non-Urgent Alert window appears.

Figure 6.1-3 Non-Urgent Alert Window



- b. To acknowledge an individual alert, select the alert and click **ACK**. The alert disappears from the window. Note that if an alert is acknowledged in this window, the alert's RESP field in the Alert Log window displays ACK.
- c. To clear all alerts without acknowledgment, click **CLEAR**. Note that all yellow alerts are cleared automatically whenever you exit the Non-Urgent Alert window.
- d. To acknowledge all yellow (**NO ACTION**) alerts, select **ACK ALL Yellow** from the pop-up menu.
- e. To acknowledge all red (**ACTION**) alerts, select **ACK ALL Red** from the pop-up menu.

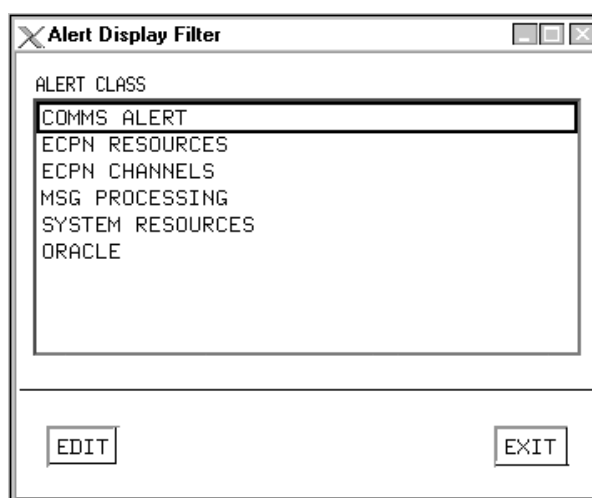
## 6.2 Alert Display Filter

The Alert Display Filter option enables you to specify how you want to be notified of alerts. For each alert class and type, the filter specifies if action, acknowledgment, or no action is required and if the alert should be audible. The filter also specifies which alert classes and types should appear in the Alert Log window ([Figure 6.1-1](#)).

### To edit the alert display filter for a specific alert class

1. Select Alerts > Alert Display Filter. The Alert Display Filter window appears, listing each available alert class.

*Figure 6.2-1 Alert Display Filter Window*



2. Select an alert class and then click EDIT. The Edit Alert Filter window for the selected alert class appears.

Figure 6.2-2 Edit Alert Filter Window

ON	CLASS	URGENT	ACTION/ACK	NO ACTION	AUDIBLE
<input type="checkbox"/>	MSG PROCESSING	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

ON	TYPE	URGENT	ACTION/ACK	NO ACTION	AUDIBLE
<input type="checkbox"/>	SEGTERM FAILURE	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	X12 VALIDATION	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	X12 FAILED DECODE	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	NO X12 AF ENTRY	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	UDF2X12 CONV	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	X122UDF CONV	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	NO X12 REPLY ENTRY	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	PARSE 838 ERROR	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	SEGTERM CONFLICT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	SYSTEM DATABASE	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

OK CANCEL

3. If you wish to be notified for all alert subclasses (i.e., types) within the selected class, select the **ON** check box for the class. All of the subclass **ON** and **NO ACTION** check boxes are selected automatically.
4. For each subclass, select one of the following check boxes to indicate the type of notification that you wish to receive:
  - **URGENT** – An Urgent Alert notification window appears on your workstation immediately upon receipt of an alert.
  - **ACTION/ACK** – A red flashing icon appears in the upper-left corner of the main menu bar. The icon will continue to flash until the alert is acknowledged or until the **ON** check box for the alert is cleared.
  - **NO ACTION** – A yellow flashing icon appears in the upper-left corner of the main menu bar. The icon will continue to flash until the alert is acknowledged or until the **ON** check box for the alert is cleared.
  - **AUDIBLE** – A discernible beep sounds when an alert matching the criteria is received. Note that if you have selected the **URGENT** check box, **AUDIBLE** is unselectable.

5. If you do *not* wish to receive notifications for all alert subclasses within the selected class, select the **ON** check box for each subclass as needed, and then select one of the notification check boxes.
6. Click **OK** to accept changes to the filter.

## 6.3 Alert Notification DB

The Alert Notification DB option enables you to specify each user who should be notified of a specific alert condition and the method by which the user(s) should be notified. You may notify yourself and/or other users (whether logged onto the system or not) via email or beeper. Up to 10 notifications can be designated for each alert type in the alert notification database.

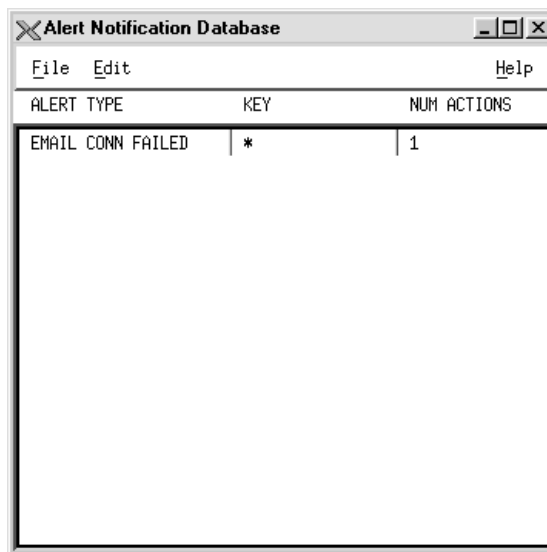
Using the Alert Notification DB option, you can do the following:

- [View](#) the notification database
- [Add](#) an alert notification to the database
- [Edit](#) an alert notification in the database
- [Delete](#) one or more alert notifications from the database

### To view the alert notification database

Select Alerts > Alert Notification DB. The Alert Notification Database window appears.

*Figure 6.3-1 Alert Notification Database Window*



This window contains an entry under the following column headings for each alert notification in the database:

**ALERT TYPE**

Type of alert generated.

**KEY**

Name of the key (usually the name of the channel) that generated the alert.

**NUM ACTIONS**

Number of alert actions that are currently associated with the alert.

**To add an alert notification to the database**

1. In the Alert Notification Database window, select Edit > Add. The Edit Alert Notification Action window appears, displaying the options available for notification.

*Figure 6.3-2 Edit Alert Notification Action Window*

**Edit Alert Notification Action**

ALERT TYPE: NO TYPE NO KEY

ACTION: 1 of 1

☐ ACTIVE

☒ EMAIL ADDRESS...

☒ BEEPER PHONE #...

ADD DELETE PREV NEXT

OK CANCEL

2. In the **ALERT TYPE** field, click the list box to display a list of alert classes for which you can assign a notification. Select an alert class from the list, and then select an alert type from its submenu. Note that the entries on the submenus match those that appear in the **SUBCLASS** field in the Alert Log window. See [Appendix B](#) for a description of the alert types.
3. When an alert type is selected, the **NO KEY** field changes to **CHANNEL (KEY)**.  
Exception: For those alert types that do not have a **CHANNEL (KEY)**, the field would remain **NO KEY**.

In the **CHANNEL (KEY)** field, enter the name of an existing channel. Any time the channel receives the selected alert type, the specified user will be notified. If you want the specified user to be notified if the alert is received by *any* channel, enter an asterisk (\*) in this field.

4. Select or clear the **ACTIVE** check box to activate or deactivate the notification action. This check box may be cleared at any time to disable the notification process without deleting the entry from the notification database.
5. To specify the desired method of notification (either an email message or a beeper page), select either the **EMAIL** or **BEEPER** option button.
  - If **EMAIL** is selected, enter the email address of the person to whom the notification should be *sent* in the **ADDRESS** field. (To edit the text of the notification message, use the **Alert Notification Message** option as described in [Section 6.4](#).) Note that the email address that appears in the *sender* field of the notification is the site email address from the **System Setup** window (discussed in [Section 2.1](#)).
  - If **BEEPER** is selected, enter the phone number of the beeper to be paged in the **PHONE #** field. Any valid phone (beeper) number may be entered in this field.

---

**NOTE:** Up to 10 notification actions may be applied to each alert type in the notification database. In order to inform more than one contact of an alert condition, a notification action must be entered for each contact.

---

6. To add another notification action to the alert type currently displayed in the **ALERT TYPE** field:
  - a. Click **ADD**. All items in the **ACTIONS** box are cleared, and the **ACTION:** field increases by one. The entries in the **ALERT TYPE** and **CURRENT (KEY)** fields remain the same. Any editing of the **ALERT TYPE** or **CURRENT (KEY)** fields will affect *all* notification actions for the alert type, not just the one currently displayed.
  - b. Repeat [Step 4](#) through [Step 6](#).

7. To view the previous or next notification action for the current alert type, click either **PREV** or **NEXT**. The **ACTION:** field changes to reflect the number of the action (e.g., 2 of 4).
8. To delete a notification action for the current alert type, use the **NEXT** or **PREV** button to display the action that you wish to delete and then click **DELETE**. The **ACTION:** field changes to reflect the deletion.
9. To save the changes to the notification database, click **OK**.

### **To edit an alert notification in the database**

In the Alert Notification Database window, double-click the alert notification, or click it once and then select **Edit > Edit**. The Edit Alert Notification Action window appears. To use this window, see [To add an alert notification to the database](#).

### **To delete one or more alert notifications from the database**

1. In the Alert Notification Database window, select each alert notification to be deleted and then select **Edit > Delete**. A warning window appears, asking you to confirm the deletion.
2. Click **OK** to continue the deletion or **Cancel** to exit the window without deleting any entries.



## 6.4 Alert Notification Message

Using the Alert Notification DB option (discussed in [Section 6.3](#)), you may specify that ECPN notify one or more users when a certain alert condition occurs. You may also indicate the notification method, either email or beeper. Each alert notification that is sent via email contains an introductory message, followed by details about the alert condition, such as the date and time that it occurred. For certain alert conditions, the alert notification also contains the text of the message that caused the alert and the errors that were detected within this message.

The Alert Notification Message option enables you to modify the introductory message that begins each alert notification emailed by ECPN.

### To view the alert notification message

1. Select Alerts > Alert Notification Message. The Edit Alert Notification Message window appears.

*Figure 6.4-1 Edit Alert Notification Message Window*



This window displays the current introductory message that begins each alert notification. Note that [Figure 6.4-1](#) displays the default message: Automatically generated message.

2. Modify the alert notification message as necessary.

This page has been intentionally left blank.

## Section 7

# Misc

---

The Misc menu provides the following options:

### Process Logs

To view the process logs for a specific day. ([Section 7.1](#))

### Time Zone Conversion

To calculate time zone differences. ([Section 7.2](#))

---

**NOTE:** If the Archive Viewer segment is installed on top of ECPN, six additional options appear on the Misc menu. These options enable you to view message logs and Oracle message data that were archived in previous versions of ECPN. For more information on these options, see [Appendix C](#).

---

## 7.1 Process Logs

The **Process Logs** option enables you to see all of the process logs for a specific day and view the contents of individual logs. A process log tracks system actions for a particular ECPN function such as the message log and records time-stamped status statements for each action. By providing detailed information, these logs assist you in troubleshooting errors that sometimes occur during system processing.

Process logs for the current day provide a dynamic view of system actions, so they are automatically updated as information changes. On the other hand, process logs for past days show a static view of the system's actions and are *not* automatically updated.

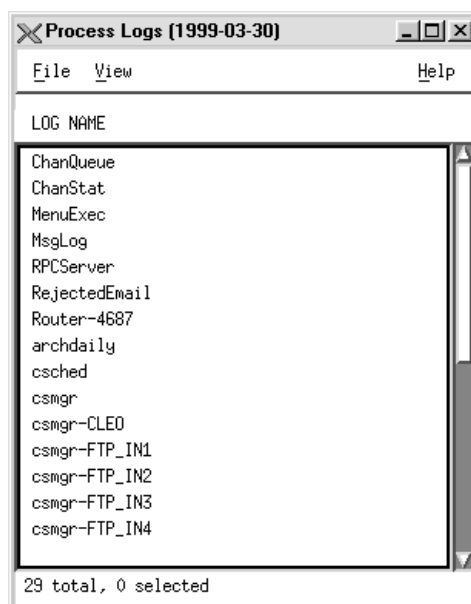
Using this option, you can do the following:

- [View](#) the process logs
- [View](#) the contents of a process log

### To view the process logs

Select **Misc > Process Logs**. The **Process Logs** window appears.

*Figure 7.1-1 Process Logs Window*



For status information on incoming email transactions, select the **emaild** process log, and for outgoing email, select the **email\_send** process log for the domain name (appears in the window as **email\_send-<domain name>**).

## To view the contents of a process log

1. In the Process Logs window, double-click the process log, or click it once and then select **View > View Log**. The process log window appears, displaying the log name in the title bar.

Figure 7.1-2 Process Log Window



**NOTE:** The Pause and Resume menu options, described in [Step 2](#), apply only to the current day's process logs, which are dynamically updated.

2. If the process is active, the process log window scrolls as it displays the flow of data.
  - a. To pause the flow of data in the window, select **File > Pause**. The scrolling process pauses.
  - b. To resume the flow of data, select **File > Resume**. The flow of data resumes.

## 7.2 Time Zone Conversion

The Time Zone Conversion option enables you to calculate time zone differences. You can enter a known time in any of the time zone fields, and the system will automatically calculate the correct time in each of the other time zones.

---

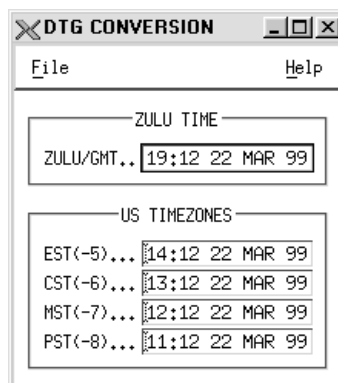
**NOTE:** The time zone conversion tool does not affect the system time set on the node on which it is running. It is intended as a time zone calculation aid only.

---

### To calculate time zone differences

1. Select Misc > Time Zone Conversion. The DTG CONVERSION window appears, displaying the current ZULU/Greenwich Mean Time (GMT) and the corresponding time in each U.S. time zone.

Figure 7.2-1 DTG CONVERSION Window



2. Enter a specific date-time group (DTG) upon which to base the time zone calculations. A DTG has the format hh:mm dd MMM yy, which is explained in [Table 7.2-1](#).

Table 7.2-1 DTG Format

Abbreviation	Explanation	Example
hh	hours	10
mm	minutes	30
dd	day of the month	04
MMM	month	SEP
yy	year (last two digits)	98

- a. To base the calculation upon a DTG in the ZULU/GMT time zone, enter the DTG in the ZULU/GMT field and press [Enter].
- b. To base the calculation upon a DTG in a U.S. time zone, enter the DTG in the appropriate field in the US TIMEZONES box and press [Enter]. The time zone formats are explained in [Table 7.2-2](#).

*Table 7.2-2 Time Zone Format*

<b>During daylight savings time</b>	<b>During standard time</b>
EDT – Eastern Daylight Savings Time	EST – Eastern Standard Time
CDT – Central Daylight Savings Time	CST – Central Standard Time
MDT – Mountain Daylight Savings Time	MST – Mountain Standard Time
PDT – Pacific Daylight Savings Time	PST – Pacific Standard Time

Note that incorrectly formatted entries will not be accepted, and the field will turn red to indicate the error.

This page has been intentionally left blank.



## Section 8

# Help

---

The options on the **Help** menu enable you to view the ECPN Homepage and the online documentation for ECPN.

The **Help** menu provides the following options:

### **S/W User's Guide**

To view the online *Software User's Guide for Electronic Commerce Processing Node*, which provides step-by-step instructions for using ECPN.

### **System Admin Guide**

To view the online *System Administrator's Guide for Electronic Commerce Processing Node*, which details the duties of the system administrator and describes how to install ECPN.

### **Security Mgr Guide**

To view the online *Security Manager's Guide for Electronic Commerce Processing Node*, which outlines the role of the security manager.

### **S/W Version Description**

To view the online *Software Version Description for Electronic Commerce Processing Node*, a text description of the version of ECPN currently running.

### **ECPN Homepage**

To view the ECPN Homepage, which enables you to conduct database searches and view online documentation. ([Section 8.1](#))

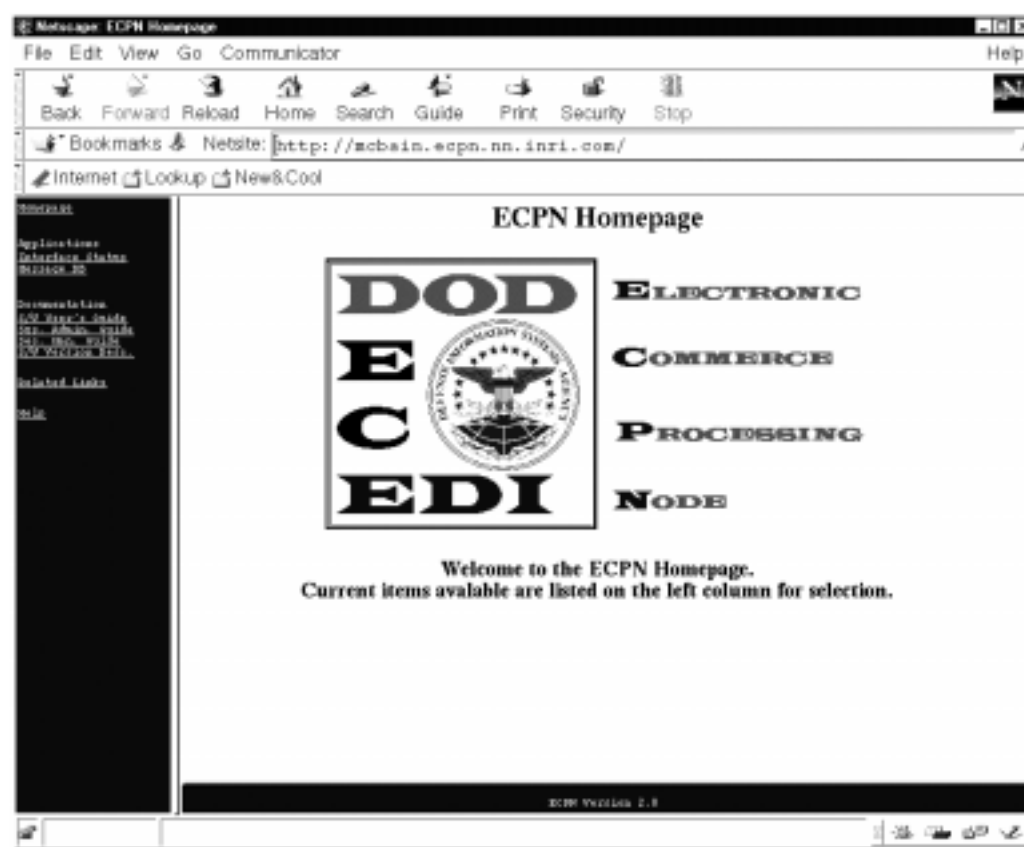
Note that of the options on the **Help** menu, only the **ECPN Homepage** has a section of instructions in this guide ([Section 8.1](#)). The remainder of the options do not require further explanation.

## 8.1 ECPN Homepage

The options available on the ECPN Homepage allow you to view the status of each ECPN communications channel, initiate database searches, and view online documentation. The URL for the ECPN Homepage must be obtained from your system administrator. (Note that the default URL is: <http://localhost>.)

To view the ECPN Homepage, invoke a web browser (e.g., Netscape Navigator) and enter the URL. The ECPN Homepage appears.

*Figure 8.1-1 ECPN Homepage*



The ECPN Homepage lists the current version of ECPN (bottom, center of window) and provides access to the following:

- [Interface Status](#) application
- [Message DB](#) application
- [Software User's Guide](#)
- [System Administrator's Guide](#)
- [Security Manager's Guide](#)

- [Software Version Description](#)
- [Related Links](#)

To access one of these items, click the entry in the left frame once.

## Interface Status Application

**NOTE:** To access the Interface Status application from the ECPN Homepage, the system administrator must add your hostname or IP address to the /h/data/global/EC/System/RPCAuthHosts file. In addition, the ECPN software must be running and system processing must be enabled.

1. To view the status of each ECPN communications channel, click Interface Status. The Channel Status window appears in the right frame of the ECPN Homepage.

Figure 8.1-2 ECPN Homepage Channel Status Window



This window is similar to the **Interface Status** window that is accessed using the ECPN **Interfaces** menu (discussed in [Section 4.2](#)) with the following differences:

- Some of the field names at the top of the **Channel Status** window have different names in the **Interface Status** window. Those differences are as follows:

Channel Status Field Name	Interface Status Field Name
TOTAL CHANNELS	NUM ENTRIES
TOTAL ACTIVE	NUM ACTIVE
TOTAL INACTIVE	NUM INACTIVE
TOTAL DOWN	NUM DOWN

- The **Channel Status** window uses the column headings **LAST TOR** and **LAST TOT** to display the last time the channel received and transmitted a message. The **Interface Status** window uses the column headings **LAST RX** and **LAST TX** to display this information.
- In the **Channel Status** window, you can choose to sort entries by the following criteria in either **ASCENDING** or **DESCENDING** order:
  - CHANNEL
  - LAST TOR
  - LAST TOT
  - BACKLOG
  - STATUS

---

**NOTE:** This window is not automatically updated every time there is a change to a channel's status. To check the most current status, click **Update** at the bottom of the window. Do *not* use the web browser's **Reload** button, as this function does not load the updated channel status information.

---

2. To view the online documentation for the **Interface Status** window, click **Help** on using ECPN **Interface Status Tool** in the bottom bar of the ECPN Homepage.

## Message DB Application

1. To search the ECPN database for a specific message, click **Message DB**. The ECPN DATABASE QUERY window appears in the right frame of the ECPN Homepage. This window is similar to the **Message Database** window (discussed in [Section 5.3](#)) with the following differences:
  - The same fields are displayed, but they are listed in three columns instead of four.
  - The View Transactions, New Query Window, Close Window, and Exit buttons, as well as the Record Count field, are not present.
2. For detailed instructions on the use of this window, click **Help on using ECPN Database Query Webpage** in the bottom bar of the ECPN Homepage.

## S/W User's Guide

To view the most current copy of the *Software User's Guide for Electronic Commerce Processing Node*, click **S/W User's Guide**. The table of contents for this document appears in the right frame of the ECPN Homepage.

## Sys. Admin. Guide

To view the most current copy of the *System Administrator's Guide for Electronic Commerce Processing Node*, click **Sys. Admin. Guide**. The table of contents for this document appears in the right frame of the ECPN Homepage.

## Sec. Man. Guide

To view the most current copy of the *Security Manager's Guide for Electronic Commerce Processing Node*, click **Sec. Man. Guide**. The table of contents for this document appears in the right frame of the ECPN Homepage.

## S/W Version Desc.

To view the most current copy of the *Software Version Description for Electronic Commerce Processing Node*, click **S/W Version Desc.** The table of contents for this document appears in the right frame of the ECPN Homepage.

## Related Links

To view a list of links to related electronic commerce sites, click **Related Links**. A list of links appears in the right frame of the ECPN Homepage.

---

**NOTE:** For additional information on your web browser, refer to the documentation provided with the browser's software.

---

## Appendix A

# Dial-up Communications

---

During dial-up communications, ECPN connects to a remote machine via modem for file transfers. The communication process between the systems is governed by a script containing a series of commands. The script includes commands for a variety of processes, including dialing the remote host and sending and receiving files.

This appendix provides a description and example of the default script for each of the following communication protocols:

- [Kermit](#)
- [ZMODEM](#)
- [CLEO](#)

---

**CAUTION:** You should *not* edit the *send* or *receive* sections of a script or the macros (e.g., *send-directory*, *receive-directory*, *transmit-files-list*) that a script invokes. Changing these elements produces unexpected results. **Exception:** You may modify the `exit_proc` macro to perform site-specific clean-up operations; however, you should *not* modify the macro's `echo` statement.

---

## A.1 Default Kermit Script File

The default Kermit script has been configured to connect to a remote machine running the UNIX operating system. Once a connection is established, this script launches a Kermit server on the remote machine and issues commands to the server to transfer files.

You must be aware of certain key sections of the script file. These key sections *must* be present in order for the ECPN software to send and receive files correctly with remote systems.

The key sections of the script file are:

- *if failure fatal* commands
- *set exit warning off* command
- *dial* line command
- *login* section
- *passwd* section
- *server* section
- *send* section
- *recv* section
- *exit* section

---

**NOTE:** You should *not* enter Kermit initialization commands into the Kermit scripts. These commands (e.g., set device, set speed, set parity) are automatically generated and stored in the .ini files (as described later in this section). Entering these types of commands in the script file produces unexpected results.

---

The Kermit script functions as follows:

1. The *if failure fatal* commands in the Kermit default script provide error checking; thus, if communication breaks down between the ECPN software and a remote host, you can pinpoint where the failure occurred in the execution of the script. When a script file quits prematurely, a brief message is recorded in the session log explaining why the script cannot continue. (For information on viewing session logs, refer to [Section 7.1](#).)

When a session fails, the fatal macro invokes the exit\_proc macro to exit cleanly. You may modify the exit\_proc macro to perform site-specific clean-up operations. For example, you can specify that before the script hangs up, it should output data to log out of the remote system. Note that you should *not* modify the echo statement in the exit\_proc macro.

2. The *set exit warning off* flag is set to prevent the local system from issuing a confirmation question asking if you wish to exit. The confirmation could cause Kermit to stall.



3. The *dial* command requires you to specify the modem number of the remote site to which you wish to connect. Enter the modem number of the remote site after the dial command (e.g., `dial 618-365-2156`). If a prefix or access code is required, insert either the `local-prefix` or `long-dist-prefix` macro directly before the modem number. The Kermit script accepts modem numbers formatted with or without separators (i.e., parentheses or hyphens).
4. Once a modem number has been dialed and the remote host has answered, the *login* section is executed. The second line in this section ensures that a system login prompt is displayed by the remote host. The `input 10 login:` line expects a `login:` string prompt from the remote host and waits up to 10 seconds for it. When this prompt appears, you provide the login name to the remote host as indicated by the `output \13` line.
5. After a login name is supplied to the remote host, the *passwd* section runs. The Kermit script expects a password prompt of `Password:`. After receiving this prompt from the remote host, you enter the password associated with the login name. If this process succeeds, the default script goes to the *server* section; otherwise, it breaks the connection with the remote host (hangup) and exits (quit), writing an error message to the session log.
6. After a login name and associated password are accepted by the remote host, the *server* section, which is optional, may be executed. This section of the script starts a Kermit process on the remote host in server mode. If starting Kermit in server mode on the remote host succeeds, then the *send* section is executed.
7. After the Kermit server is started on the remote host, the *send* section of the script begins processing. The script invokes the `send-directory` macro which executes a command to change directory (`cd`) to the local system's outgoing messages directory. This directory contains files that are ready for transmission. These file names are loaded into the `transmit-files-list`, which is then used to feed the `send_file` call which actually transmits each file to the remote host. The files are sent in the order in which they were retrieved from the outgoing message queue. When the send branch completes (or if no files are available for transmit), the script proceeds to the *recv* section. If an error occurs when the files are sent, the `fatal` macro is called.
8. The *recv* section enables the software to receive messages/files from the remote host. This part of the script first checks the `receive-files` macro, which is set by the **TRANSMIT ONLY** option (described in [Section 4.1](#)). If the option is on, the script skips the *recv* section and goes to the *exit* portion of the script; otherwise, the script changes to the directory specified by the `receive-files` macro. The line in the macro that changes to the receive directory *must* be present in order for the software to receive files from the remote machine. The script then issues the Kermit `get` command to the remote Kermit server, with the wildcard `*` (asterisk). This command asks the remote Kermit server for all the files in its current directory. If the `get` is successful, the script echoes `Receive completed` to the session log.

Currently, the scripts are *not* configured to delete the files that have been successfully downloaded from the remote host. It is up to the remote system's administrator to determine if or when files have been successfully downloaded and to remove those files. If the remote system's administrator does not delete these files, then duplicate messages/files can be processed by the software.

9. When file transfer has taken place, the *exit* section of the script runs. It invokes the `exit_proc` macro which breaks the connection with the remote host (`hangup`) and then exits (`quit`).

The `exit_proc` macro is invoked to exit cleanly. You may modify the `exit_proc` macro to perform site-specific clean-up operations. For example, you can specify that before the script hangs up, it should output data to log out of the remote system. Note that you should *not* modify the `echo` statement in the `exit_proc` macro.

## Contents of the Default Kermit Script File

---

**NOTE:** You may edit the Kermit dial-up script to include macros that supply information necessary to dial phone numbers from your site. After the dial command, you may specify either the `local-prefix` or the `long-dist-prefix` macro. Specifying a dial-out prefix is optional, but if you choose to do so, you should specify only one. For information on setting the values for these prefixes, see [Section 2.1](#).

---

```
;
; The exit_proc macro is called to perform any clean-up required
; after a normal or failed session. For a failed session,
; the exit_proc macro is called from the fatal macro. If
necessary,
; the exit_proc macro can be modified to perform any site-
specific
; cleanup operations (e.g, output of data to the logout of remote
; system before hanging up phone).
;
; N.B. The echo statement of the Last Sequence Number in the
; exit_proc macro is required for all scripts -- do not modify
; the echo statement if modifying the exit_proc macro.
;

define exit_proc -
echo {\10\10Last Sequence Number is \m(sequence-number)}, -
hangup, -
quit
```

```
; prevent kermit from hanging up waiting for confirmation on exit
set exit warning off
```

```
; phone number goes after "dial" on next line
; To utilize dial prefixes from System Setup, preface phone
number with
; either "\m(local-prefix)" or "\m(long-dist-prefix)"
; (e.g. dial \m(local-prefix),,555-1234 for a local number or
; dial \m(long-dist-prefix),,555-1234 for a long distance
number).
```

```
dial [\m(local-prefix)| \m(long-dist-prefix)]<number>
if failure fatal {Cannot dial phone}
```

```
;login
input 10 login:
if failure fatal {Did not receive "login:" prompt}
; username goes after "output" on next line
output \13
if failure fatal {Could not send username}
```

```
;passwd
input 5 Password:
if failure fatal {Did not receive "Password:" prompt}
; password goes after "output" on next line
output \13
if failure fatal {Could not send password}
```

```
;server - for starting a kermit server on the remote machine
input 30 %
if failure fatal {Did not receive command prompt}
output kermit -ix \13
if failure fatal {Could not send kermit command}
input 30 KERMIT READY TO SERVE...
if failure fatal {Did not receive Kermit server startup
sequence}
```

```
;send
cd \m(send-directory)
if failure fatal {Can not cd to local send directory: \m(send-
directory)}
open read \m(transmit-files-list)
if failure fatal {Can not open list of files to transmit}
read \%f
while success {
    send_file \%f
    read \%f
}
```

```
close read

;recv
xif equal \m(receive-files) true {
    cd \m(receive-directory)
    if failure fatal {Can not cd to local recv directory:
\m(receive-directory)}
    get *
    if failure echo No file to receive
    else echo Receive completed
}

;exit by invoking the exit_proc macro.
exit_proc
```

### Example Kermit .ini file

Each time a dial-up channel is started, ECPN creates an .ini (initialization) file for the channel. This .ini file contains the values for the environment variables and macros that a channel's script uses as it runs.

In the example Kermit .ini file below, the first 15 lines are variables, and ECPN draws the values for the variables from the edit channel configuration for the channel. Lines 16 to 23 contain variables and macros that are set by the system as well as the edit channel configuration. The last portion of the .ini file (lines 24 to 36) consists of macros that are automatically generated and set by the ECPN software.

```
set modem hayes
set line /dev/ttyd0p0
set terminal bytesize 7
set file type binary
set parity even
set baud 19200
set escape-character 028
set dial timeout 60
set input timeout proceed
set file collision rename
set send packet-length 1024
set receive packet-length 1024
set receive end-of-packet 13
set block 1
set window 1

define sequence-number 0
define dial-out-prefix
```

```
define long-dist-prefix
define receive-files true
define transmit-files-list FileList
define send-directory /h/data/global/EC/Messages/OutRaw/KERMIT
define receive-directory /h/data/global/EC/Messages/InRaw/
    KERMIT
define fatal -
    echo {\10\10ABORT:\%1}, -
    exit_proc

define send_file -
    echo Sending \%1, -
    send \%1, -
    xif failure { -
        fatal {\%1 send Unsuccessful} -
    } else { -
        echo Sent \%1 Successfully, \f(size) bytes, -
        assign sequence-number \feval(\m
        (sequence-number) + 1) -
    }
}
```

## A.2 Default ZMODEM Script File

The ZMODEM script is for channels that require the use of the ZMODEM protocol for communicating with remote sites. The ZMODEM script functions in a manner similar to the Kermit script (described in [Section A.1](#)). However, the ZMODEM script sends with the *sz* command, interacting with an *rz* command on the remote side, and receives with the *rz* command, interacting with an *sz* command on the remote side. Another difference between the Kermit and ZMODEM scripts is that the ZMODEM script does not need to start Kermit on the remote end, so the server section is not needed.

### Contents of the Default ZMODEM Script File

---

**NOTE:** You may edit the ZMODEM dial-up script to include macros that supply information necessary to dial phone numbers from your site. After the dial command, you may specify either the `local-prefix` or the `long-dist-prefix` macro. Specifying a dial-out prefix is optional, but if you choose to do so, you should specify only one. For information on setting the values for these prefixes, see [Section 2.1](#).

---

```
;
; The exit_proc macro is called to perform any clean-up required
; after a normal or failed session. For a failed session,
; the exit_proc macro is called from the fatal macro. If
necessary,
; the exit_proc macro can be modified to perform any site-
specific
; cleanup operations (e.g, output of data to the logout of remote
; system before hanging up phone).
;
; N.B. The echo statement of the Last Sequence Number in the
; exit_proc macro is required for all scripts -- do not modify
; the echo statement if modifying the exit_proc macro.
;

define exit_proc -
echo {\10\10Last Sequence Number is \m(sequence-number)}, -
hangup, -
quit

; prevent kermit from hanging up waiting for confirmation on exit
set exit warning off
```

```
; phone number goes after "dial" on next line
; To utilize dial prefixes from System Setup, preface phone
number with
; either "\m(local-prefix)" or "\m(long-dist-prefix)"
; (e.g. dial \m(local-prefix),,555-1234 for a local number or
; dial \m(long-dist-prefix),,555-1234 for a long distance
number).
```

```
dial [\m(local-prefix)| \m(long-dist-prefix)]<number>
if failure fatal {Cannot dial phone}
```

```
;login
input 10 login:
if failure fatal {Did not receive "login:" prompt}
; username goes after "output" on next line
output \13
if failure fatal {Could not send username}
```

```
;passwd
input 5 Password:
if failure fatal {Did not receive "Password:" prompt}
; password goes after "output" on next line
output \13
if failure fatal {Could not send password}
```

```
;send
cd \m(send-directory)
if failure fatal {Can not cd to local send directory: \m(send-
directory)}
open read \m(transmit-files-list)
if failure fatal {Can not open list of files to transmit}
read \%f
while success {
    input 5 %
    output /h/EC/progs/rz -D<port> \13
    input 5 program
    sz_file \%f
    read \%f
}
close read
```

```
;recv
xif equal \m(receive-files) true {
    cd \m(receive-directory)
    if failure fatal {Can not cd to local recv directory:
\m(receive-directory)}
    input 5 finished
```

```
        output /h/EC/progs/sz -D<port> <file> \13
        rz
        if failure echo No file to receive
        else echo Receive completed
    }

;exit by invoking the exit_proc macro.
exit_proc
```



## Example ZMODEM .ini file

Each time a dial-up channel is started, ECPN creates an .ini (initialization) file for the channel. This .ini file contains the values for the environment variables and macros that a channel's script uses as it runs.

In the example ZMODEM .ini file below, the first 15 lines are variables, and ECPN draws the values for the variables from the edit channel configuration for the channel. Lines 16 to 23 contain variables and macros that are set by the system as well as the edit channel configuration. The last portion of the .ini file (lines 24 to 40) consists of macros that are automatically generated and set by the ECPN software.

```
set modem hayes
set line /dev/ttyd0p0
set terminal bytesize 7
set file type binary
set parity even
set baud 19200
set escape-character 028
set dial timeout 60
set input timeout proceed
set file collision rename
set send packet-length 1024
set receive packet-length 1024
set receive end-of-packet 13
set block 1
set window 1

define sequence-number 0
define dial-out-prefix
define long-dist-prefix
define receive-files true
define transmit-files-list FileList
define send-directory /h/data/global/EC/Messages/OutRaw/ZMODEM
define receive-directory /h/data/global/EC/Messages/InRaw/
    ZMODEM
define fatal -
    echo {\10\10ABORT:\%1}, -
    exit_proc

define rz !/h/HP-UX.B.10.20/progs/rz -D/dev/ttyd0p0 \%1 < /dev/
    ttyd0p0 > /dev/ttyd0p0
define sz !/h/HP-UX.B.10.20/progs/sz -D/dev/ttyd0p0 \%1 < /dev/
    ttyd0p0 > /dev/ttyd0p0
define sz_file -
    echo Sending \%1, -
    sz \%1, -
```

```
xif failure { -  
    fatal {\%1 send Unsuccessful} -  
} else { -  
    echo Sent \%1 Successfully, \f(size) bytes, -  
    assign sequence-number \feval(\m(sequence-  
    number) + 1) -  
}
```

## A.3 Default CLEO Script File

Similar to the Kermit and ZMODEM scripts, the CLEO script contains transmit and receive commands to transfer files between ECPN and the remote host. After executing the transmit section, the CLEO script (at label 400) evaluates whether the TRANSMIT ONLY option is set (as described in [Section 4.1](#)). If the option is set, the script skips the receive section and exits.

Unlike the Kermit and ZMODEM scripts in which the ECPN software looks for certain strings to be echoed, in the CLEO script, the software evaluates the exit status. For this reason, it is *critical* for the scripts to use the defined exit codes when their respective conditions arise.

lists each possible CLEO exit status used by the software to determine the success or failure of remote communications. (These codes are in addition to the standard 3780Plus exit codes, which are listed in the *CLEO Users Guide*.) Any exit code value other than zero (0) is interpreted as an error. The software will generate an alert for only those exit codes that display Yes in the Alert Generated? column in [Table A.3-1](#).

Table A.3-1 CLEO Exit Codes

Value	Exit Code Description	Alert Generated?
0	Normal End of File	No
22	Keyboard Forced Abort	No
23	Remote Machine Hangup	No
24	System Line Down (Transmit)	Yes
25	System Line Down (Receive)	Yes
26	Unable to Open File	No
27	No Incoming Data	No
28	Early End Of File	No
29	Interrupt End of File	No
30	No Data Received before EOT	No
31	Line Bid Contention (Transmit)	Yes
32	Line Bid Contention (Receive)	Yes
33	Buffer Overflow	No
34	Transmit Failure Abort	No
35	Remote Terminal Aborted	Yes
36	Print Failed	No
37	Receive Failed	No
38	Transmit Failed	No

Table A.3-1 CLEO Exit Codes (Continued)

Value	Exit Code Description	Alert Generated?
39	Idle Limit Expired	No
40	Bid Limit Expired (Transmit)	Yes
41	Bid Limit Expired (Receive)	Yes
42	Delay Limit Expired	No
43	Receive Limit Expired	No
44	Retransmit Limit Expired	No
45	Repeat Limit Expired	Yes
46	Wait Limit Expired	No
47	Configuration File Error	Yes
48	Dial Command Error	Yes

## Contents of the Default CLEO Script File

---

**NOTE:** You may edit the CLEO dial-up script to include arguments that supply information necessary to dial phone numbers from your site. In label 200, you may specify either the local prefix or the long-distance prefix by following the directions in the note above the label. Specifying a dial-out prefix is optional, but if you choose to do so, you should specify only one. For information on setting the values for these prefixes, see [Section 2.1](#).

---

```
100 CO /h/data/global/EC/CleoConfig/<lchannel_name>.cfg
BR ON FAIL TO 2047
##
## NOTE -- All dial commands are commented out below.  Activate
##         the applicable line
##         by deleting the leading "##" and also replace
##         "<number>" with the number
##         to be dialed.
##
## use this form for local calls utilizing Dial Prefix from
System setup...
##200 AU %2 t2 <number> r2
## use this form for long distance calls utilizing Long Distance
Prefix from System setup...
##200 AU %3 t2 <number> r2
## use this form for calls not utilizing either dial prefix from
System Setup...
```

```
##200 AU <number> r2
##
BR ON FAIL TO 2048
##
300 SY echo "Executing CLEO transmit command..."
BI /h/data/global/EC/Messages/OutRaw/<channel_name>/
<shortfilename>
BR ON NRMEOF TO 400
BR ON NOFILE TO 400
BR ON ABORT TO 2022
BR ON BIDLMT TO 2040
BR ON CONTEN TO 2031
BR ON DSKERR TO 2038
BR ON HANGUP TO 2023
BR ON IDLE TO 2039
BR ON INTRPT TO 2029
BR ON LINDWN TO 2024
BR ON REPEAT TO 2045
BR ON RETRAN TO 2044
BR ON RMTABT TO 2035
BR ON TXABRT TO 2034
BR ON WAIT TO 2046
##
## For any other transmit error, go to Transmit failed:
## (BR ON TRUE is an unconditional branch=GOTO)
BR ON TRUE TO 2038
##
## Skip receive command if token is set.
400 BR ON %1 = 1 TO 1000
##
500 SY echo "Executing CLEO receive command..."
RE /h/data/global/EC/Messages/InRaw/<channel_name>/
<shortfilename>
BR ON NRMEOF TO 1000
BR ON NOFILE TO 1000
BR ON NODATA TO 1000
BR ON ABORT TO 2022
BR ON BIDLMT TO 2041
BR ON BUFOVF TO 2033
BR ON CONTEN TO 2032
BR ON DELAY TO 2042
BR ON DSKERR TO 2037
BR ON EAREOF TO 2028
BR ON EOTND TO 2030
BR ON HANGUP TO 2023
BR ON IDLE TO 2039
BR ON INTEOF TO 2022
BR ON LINDWN TO 2025
```

```
BR ON RECEIV TO 2043
BR ON RETRAN TO 2044
BR ON WAIT   TO 2046
##
## For any other receive error, go to Receive failed:
BR ON TRUE TO 2037
##
## Successful completion, Normal EOF
1000 VO
QU 0

## Keyboard forced abort, interrupt EOF
2022 VO
QU 22

## Remote machine hangup
2023 VO
QU 23

##System line down
2024 VO
QU 24

##System line down
2025 VO
QU 25

## Unable to open file
2026 VO
QU 26

## No incoming data
2027 VO
QU 27

## Early end of file
2028 VO
QU 28

## Interrupt end of file
2029 VO
QU 29

## No data received before EOT
2030 VO
QU 30
```

## Line bid contention (transmit)  
2031 VO  
QU 31

## Line bid contention (receive)  
2032 VO  
QU 32

## Buffer overflow  
2033 VO  
QU 33

## Transmit failure abort  
2034 VO  
QU 34

## Remote terminal aborted  
2035 VO  
QU 35

## Print failed  
2036 VO  
QU 36

## Receive failed  
2037 VO  
QU 37

## Transmit failed  
2038 VO  
QU 38

## Idle limit expired  
2039 VO  
QU 39

## Bid limit expired (transmit)  
2040 VO  
QU 40

## Bid limit expired (receive)  
2041 VO  
QU 41

## Delay limit expired  
2042 VO  
QU 42

## Receive limit expired  
2043 VO  
QU 43

## Retransmit limit expired  
2044 VO  
QU 44

## Repeat limit expired  
2045 VO  
QU 45

## Wait limit expired  
2046 VO  
QU 46

## Configuration file error  
2047 VO  
QU 47

## Dial command error  
2048 VO  
QU 48



## Appendix B

# Alerts

---

Alerts are generated by the system to notify you of specific conditions or problems. Using the options on the **Alerts** menu (discussed in [Section 6](#)), you can customize the alert features.

You may view and acknowledge alerts in one of three windows:

- **Alert Log** – To view this window, select **Alerts > Alert Log**.
- **Urgent Alert** – When an urgent alert is generated, this window automatically appears on top of any open windows on the display.
- **Non-Urgent Alert** – When a non-urgent alert is generated, a flashing icon appears at the left corner of the main menu bar. Click this icon to view the **Non-Urgent Alert** window.

Using the **Alert Display Filter** option, you may specify each alert class and subclass for which you wish to receive a notification. You may also use this option to select how you wish to be notified, whether the notification should be urgent or non-urgent, and whether it requires action or not.

Others who are not logged on the system may also wish to be notified of certain alert conditions. Using the **Alert Notification DB** option, you can notify them by either email or beeper. You can include a specialized message in emailed alert notifications using the **Alert Notification Message** option.

This appendix describes the alert statements that can appear in the **SUBCLASS** field in the **Alert Log** window (described in [Section 6.1](#)). The alert statements appear alphabetically in bold text. Following each alert statement is the name of the class to which the alert belongs, a description of the condition that caused the alert, and a recommended action.

## **CHANNEL DIED**

Class: ECPN Channels

Condition: An active communications channel exited or was killed.

Action: Restart the channel. Check the session log to determine the reason for the failure.

## **CLEO**

Class: ECPN Channels

Condition: One of the following errors occurred while attempting to transmit via a CLEO channel:

- Unable to append outgoing message to a batch file.
- Could not transmit out on CLEO.

Action: Check the CLEO channel configuration and verify that the modems are responsive.

## **CLEO ASCII**

Class: ECPN Channels

Condition: An outgoing message that is configured for ASCII transfer mode over a CLEO channel contains a character that either does not translate from ASCII to EBCDIC or affects transmit stream handling (as described in the *CLEO 3780Plus User's Guide*).

Action: Change the channel configuration to binary transfer mode and retransmit the message, or contact the message sender to correct and resend the message.

## **CLEO BIDLMT**

Class: ECPN Channels

Condition: CLEO bid limit has expired on transmit or receive.

Action: For more information on the condition, refer to the CLEO documentation. Depending on whether the error occurred locally or remotely, you may need to contact your system administrator or the remote site.

**CLEO CONFIG**

Class: ECPN Channels

Condition: The CLEO configuration file failed to load.

Action: For more information on the condition, refer to the CLEO documentation. Depending on whether the error occurred locally or remotely, you may need to contact your system administrator or the remote site.

**CLEO CONTEN**

Class: ECPN Channels

Condition: CLEO line bid contention error on transmit or receive.

Action: For more information on the condition, refer to the CLEO documentation. Depending on whether the error occurred locally or remotely, you may need to contact your system administrator or the remote site.

**CLEO DIAL**

Class: ECPN Channels

Condition: Failure occurred while executing the CLEO dial command.

Action: For more information on the condition, refer to the CLEO documentation. Depending on whether the error occurred locally or remotely, you may need to contact your system administrator or the remote site.

**CLEO HANGUP**

Class: ECPN Channels

Condition: CLEO transmission failure. The remote machine hung up.

Action: The transmission of data may be incomplete. Contact the remote site.

## **CLEO LINDWN**

Class: ECPN Channels

Condition: CLEO system line is down on transmit or receive (note that not all modems detect when lines are down).

Action: For more information on the condition, refer to the CLEO documentation. Depending on whether the error occurred locally or remotely, you may need to contact your system administrator or the remote site.

## **CLEO REPEAT**

Class: ECPN Channels

Condition: CLEO transmission failed because the repeat limit expired.

Action: For more information on the condition, refer to the CLEO documentation. Depending on whether the error occurred locally or remotely, you may need to contact your system administrator or the remote site.

## **CLEO UNKNOWN**

Class: ECPN Channels

Condition: An unknown CLEO error occurred.

Action: For more information on the condition, refer to the CLEO documentation. Depending on whether the error occurred locally or remotely, you may need to contact your system administrator or the remote site.

## **DEVICE RESOURCE**

Class: System Resources

Condition: System was unable to create semaphores for devices.

Action: Verify that the CLEO, Kermit, and beeper device files contain valid entries.

## **DIAL FAILED**

Class: ECPN Channels

Condition: Kermit or ZMODEM dial out command failed.

Action: Check the Kermit and ZMODEM channel configuration. Check the modem status.

## EMAIL CONN FAILED

Class: Comms Alert

Condition: System was unable to connect to an email domain within the number of attempts specified in the **CONNECTION FAIL THRESHOLD** field in the domain's Edit Domain Threshold window ([Figure 3.3-2](#)). One of the following problems may have occurred:

- System was unable to connect to the remote host because of an intermittent network outage.
- System was unable to connect to the remote host because of an incorrect email address in the **SEND TO** field of the **EDIT EMAIL** window ([Figure 4.1-24](#)).

Action: The system will continue trying to connect to remote host until it can establish a connection. If the problem is due to a network error, the messages queued to the domain will be transmitted as soon as the network is functioning properly. If the problem continues, you may need to contact the system administrator or the remote site, depending on whether the error occurred locally or remotely.

If the problem is due to an incorrect email address, you should follow these steps:

1. **Send messages to error queue:** In the Outgoing Email Queues window ([Figure 3.3-1](#)), select all of the messages in the domain's queue, and then select **Message > Delete to Error Queue**.
2. **Correct email SEND TO address:** In the email channel's Edit Email window, check the email address in the **SEND TO** field (as described in [Section 4.1.7](#)) and make corrections as necessary.
3. **Reroute messages:** From the error queue, reroute the messages, as described in [Section 3.2](#).
4. **Delete incorrect domain:** In the Outgoing Email Queues window, select the incorrect domain (the one from which you cancelled the messages), and then select **Domain > Delete Domain**.

## **EMAIL FETCH**

Class: ECPN Channels

Condition: The emaild program could not fetch a message from ECPN's mailbox. The mailbox may be corrupt.

Action: Contact the system administrator. The system administrator should rename the ECPN mailbox in order to create a backup. The system will automatically create a new mailbox. Provided that the backup mailbox is readable, the system administrator should compare its contents to the contents of the new mailbox to determine which senders need to retransmit their messages.

## **FILE ACCESS ERROR**

Class: System Resources

Condition: A system file was unable to be accessed.

Action: Contact the system administrator. Verify that all ECPN processes are still running.

## **FTP INCOMPLETE**

Class: ECPN Channels

Condition: An FTP error occurred after establishing an FTP connection and beginning the transmission of data. An **FTP INCOMPLETE** error may occur in the process of sending outgoing files to a remote host, or receiving incoming files from a remote host (push/pull channel configurations only).

Action: Contact the system administrator. Verify the network connectivity to the remote site.

## **FTP UNAVAILABLE**

Class: ECPN Channels

Condition: One of the following FTP errors occurred prior to actual data transmission:

- Unable to obtain an FTP login on the remote host.
- Unable to switch to binary mode after FTP login on the remote host.
- Problems accessing directories on the remote host after logging in.

Action: Make sure the remote account/directories exist on the remote host and that the FTP channel is configured correctly. Verify network connectivity to the remote site.

**KERMIT**

Class: ECPN Channels

Condition: One of the following errors occurred while attempting to transmit via a Kermit channel:

- Unable to append outgoing message to a batch file.
- Could not transmit out on Kermit.

Action: Check the Kermit channel configuration. Check the Kermit lock files (available in /var/spool/lock) on the file system and verify that the modems are stable.

**NO 838**

Class: Message Processing

Condition: The outgoing translator could not find the 838 corresponding to the outgoing GS02.

Action: Check the GS ADDRESS field in the ADDRESS/IDS tab of the Edit Trading Partner window.

**NO CHANNEL**

Class: ECPN Channels

Condition: The system was unable to contact the specified channel because it does not exist in the communications channel database ([Figure 4.1-1](#)), or the channel is not turned on.

Action: Ensure that the channel has been correctly added in the Communications Manager ([Figure 4.1-1](#)) and that the channel is turned on.

**NO X12 AF ENTRY**

Class: Message Processing

Condition: No X12 auto-forwarding entry was found for an incoming message. The message will not be forwarded to any outgoing channels.

Action: Add an X12 auto-forwarding route for the incoming channel associated with this message and reroute the message.

## NO X12 REPLY ENTRY

Class: Message Processing

Condition: While performing a reply route check for an outgoing message, the system is unable to find an entry in the routing database that would enable the message's recipient to reply to the message's originator (as specified in the GS02 [Application Sender's Code] field). The message is placed in the error queue and is not transmitted. Note that the system performs this check only if the **CHECK REPLY ROUTE AVAILABLE** check box for the channel is selected.

Action: Use the error queue and JDS Viewer (as discussed in [Section 3.2](#)) to locate the errored message and the sender's address. (Hint: As you navigate through the message's errors in the JDS Viewer, the GS02 field is highlighted, and **No Reply Route Available** appears in the Error Description field.) In the routing database, add a routing entry for the original sender of the message (as described in [Section 5.1](#)), and then reroute the message.

## ORACLE EXIT

Class: Oracle

Condition: One of the following events occurred during the Oracle data injection processes:

- Could not open the RPC queue.
- Could not connect to Oracle.
- Encountered a fatal condition.

Action:

- Ensure the RPCServer process is running, as well as ObjInject and TrnInject. If either ObjInject or TrnInject is not running, you may switch to an ECPN user and run the process manually.
- Ensure the database and SQL\*Net are running, by entering the following commands:
  - `ps -ef | grep ora_`



Verify that all seven of the following processes appear in the output:

```
oracle 12260    1    0   Jan 6   ?    0:24   ora_lgwr_ecpn20
oracle 12258    1    0   Jan 6   ?    2:19   ora_dbwr_ecpn20
oracle 12262    1    0   Jan 6   ?    0:02   ora_smon_ecpn20
oracle 12264    1    0   Jan 6   ?    0:00   ora_reco_ecpn20
oracle 12256    1    0   Jan 6   ?    0:24   ora_pmon_ecpn20
oracle 12268    1    0   Jan 6   ?    0:04   ora_d000_ecpn20
oracle 12266    1    0   Jan 6   ?    0:04   ora_s000_ecpn20
```

- `ps -ef | grep tnslnsr`

Verify the following process appears in the output

```
oracle 12244    1    0   Jan 6   ?    0:01   /home2/oracle/app/
                                     oracle/product/
                                     7322/bin/tnslsnr
                                     LISTENER -
```

- If the Oracle database and SQL\*Net are running, you may need to shut down and restart the Oracle database:
  - Stop the ECPN software
  - Open an xterm window and switch to oracle user
  - Enter: `dbshut IMMEDIATE`
  - Enter: `lsnrctl stop`
  - Enter: `lsnrctl start`
  - Enter: `dbstart`
  - Close the xterm window and restart the ECPN software

## ORACLE WRITE

Class: Oracle

Condition: One of the following events occurred during the Oracle data injection processes:

- Encountered a non-fatal data error.
- Experienced a temporary problem with the connection to Oracle, and will try again.
- Encountered a non-fatal error condition when attempting to connect to Oracle. Other alerts may follow.
- Encountered a high threshold of data in the Oracle database; occurs when data levels reach the following levels: 80%, 95%, 98%, and 100%.

Action: If the threshold of data in the Oracle database is high, archive old tables (as described in [Section 2.3](#)) to free space.

## PARSE 838 ERROR

Class: Message Processing

Condition: An incoming X12 838 (trading partner profile) message failed parsing due to an invalid DUNS or DUNS+4 number. A DUNS number (N103 qualifier code is 1) is invalid if it is not *exactly* nine characters in length and/or contains non-numeric characters. A DUNS+4 number (N103 qualifier code is 9) is invalid if it is not *exactly* 13 characters in length and/or contains non-numeric characters.

Action: Request that the 838 message sender make the appropriate corrections and retransmit the message.

## QUEUE ERROR

Class: Message Processing

Condition: Could not open queue file.

Action: Check the permissions of the queue file and verify that the file has not been corrupted.

## RAW ARCHIVE FAILED

Class: ECPN Resources

Condition: An error occurred while archiving a file for either passive or active communications.

Action: Check permissions on incoming and outgoing directories in `/h/data/global/EC/Archives` directories. Check the disk space.

## SEGTERM CONFLICT

Class: Message Processing

Condition: When processing an outgoing message, ECPN encountered a character within the message content that is also specified as a replacement character for a segment terminator or element separator. If the X12 TERMINATORS/SEPARATORS IN MSG BODY check box is selected in the edit channel's **CONVERSION** tab (as described in [Section 4.1.4, Step 6](#)), ECPN performs the outgoing character conversions and transmits the message to the intended recipient with errors. The recipient's system may not be able to parse the message.

Action: Notify the intended recipient that the message may need to be manually parsed or edited upon receipt.

## SEGTERM FAILURE

Class: Message Processing

Condition: ECPN could not perform segment terminator or element separator conversions when processing an outgoing message because at least one of the replacement characters specified for outgoing character conversion is also used in the message's content, and the X12 TERMINATORS/SEPARATORS IN MSG BODY check box is *not* selected in the edit channel's **CONVERSION** tab (as described in [Section 4.1.4, Step 6](#)). Replacing the terminators or separators may render the message unparsable.

Action: Edit the segment terminator and element separators in the channel's edit window, selecting characters that are not used in the message's content. Next, retransmit the message, or contact the message's sender to correct and resend the message.

## SYSTEM DATABASE

Class: Message Processing

Condition: System setup database is not set up properly or has been corrupted.

Action: Verify that data is entered properly in the **System Setup** window, and then confirm that the database file has not been corrupted.

## UDF2X12 CONV

Class: Message Processing

Condition: An error occurred while translating an outgoing X12 message to UDF format.

Action: Confirm that the message type is correct for the channel.

**UNCORRELATED FILE**

Class: Message Processing

Condition: Only one file of a pair (.idx and .ps) was received within a designated time period on an SPS-EDA channel. For information on setting up this alert notification, see [Appendix G](#).

Action: In the Alert Log window ([Figure 6.1-1](#)), check the MESSAGE field to determine the record number and name of the uncorrelated file. Then run the CorrDB\_text program (as described in [Appendix G](#)) to delete the uncorrelated file.

**UNK SENDER**

Class: ECPN Channels

Condition: The address in the from line of a received email message is unknown.

Action: Check the RECEIVE FROM field in the email channel's edit window (EMAIL tab), as discussed in [Section 4.1.7](#).

**X12 FAILED DECODE**

Class: Message Processing

Condition: An incoming message failed ISA, GS, or ST decoding.

Action: If the message was originally a UDF and failed for trading partner database reasons, update the corresponding trading partner database entry, and then retranslate the message.

**X122UDF CONV**

Class: Message Processing

Condition: An error occurred while translating an incoming UDF message to X12 format.

Action: Confirm that the message type is correct for the channel.

**X12 VALIDATION**

Class: Message Processing

Condition: Incoming message failed X12 envelope validation. ISA/IEA, GS/GE, or ST/SE lines are missing or incorrectly nested or the control numbers do not match.

Action: Verify the correctness of failed message and notify the originator of message.

**ZERO LENGTH FILE**

Class: ECPN Channels

Condition: A zero-length file was received on an incoming communications channel. |

Action: Contact the remote site's system administrator to verify the communications status. |

**ZMODEM**

Class: ECPN Channels

Condition: One of the following errors occurred while attempting to transmit via a ZMODEM channel:

- Unable to append outgoing message to a batch file.
- Could not transmit out on ZMODEM.

Action: Check the ZMODEM channel configuration. Check the ZMODEM lock files (available in /var/spool/lock) on the file system and verify that the modems are stable.

This page has been intentionally left blank.

## Appendix C

# Viewing Pre-2.0 Message Archives

---

The Archive Viewer segment enables you to view message logs or Oracle message data that were archived *prior* to ECPN Version 2.0.0.3. If the Archive Viewer segment has been installed on top of ECPN (as described in [Section 4.1](#) of the *System Administrator's Guide for Electronic Commerce Processing Node*), the following options appear on the Misc menu:

### View Pre-1.0.8 ILog Archives

For viewing incoming message logs archived in ECPN Versions 1.0.7.5-1.0.7.5P8.

### View Pre-1.0.8 OLog Archives

For viewing outgoing message logs archived in ECPN Versions 1.0.7.5-1.0.7.5P8.

### View Pre-2.0 ILogs Archives

For viewing incoming message logs archived in ECPN Versions 1.0.8-1.0.8.3.

### View Pre-2.0 OLogs Archives

For viewing outgoing message logs archived in ECPN Versions 1.0.8-1.0.8.3.

### Restore Pre-2.0 Oracle Archives

For restoring Oracle tables that were archived prior to ECPN Version 2.0.0.3.

### View Pre-2.0 Oracle Archives

For viewing Oracle records archived prior to ECPN Version 2.0.0.3, once the Oracle tables have been restored.

---

**NOTE:** To view message logs and message database tables that were archived *after* ECPN Version 2.0.0.3, use the Archive/Restore option (described in [Section 2.3](#)).

---

## To view pre-1.0.8 incoming log archives

1. Select Misc > View Pre-1.0.8 ILog Archives. The Incoming Archive Viewer appears.

Figure C.0-1 Incoming Archive Viewer



2. In the ARCHIVE PATH field, enter the path in which the archived logs were placed and press [Enter]. Each log archived in the specified path is displayed in the MESSAGE LOGS box.
3. Select the log that you wish to view and click VIEW LOG. An incoming message log window appears, displaying the messages contained within the selected log. Note that you may view but not edit the data in the incoming message log window.

For information on using an incoming message log window, see Section 4.1 of the *User's Guide for Electronic Commerce Processing Node, Version 1.0.7.5.P8*, April 1997.

## To view pre-1.0.8 outgoing log archives

1. Select Misc > View Pre-1.0.8 OLog Archives. The Outgoing Archive Viewer appears. This window has the same format as the Incoming Archive Viewer ([Figure C.0-1](#)).
2. In the ARCHIVE PATH field, enter the path in which the archived logs were placed and press [Enter]. Each log archived in the specified path is displayed in the MESSAGE LOGS box.



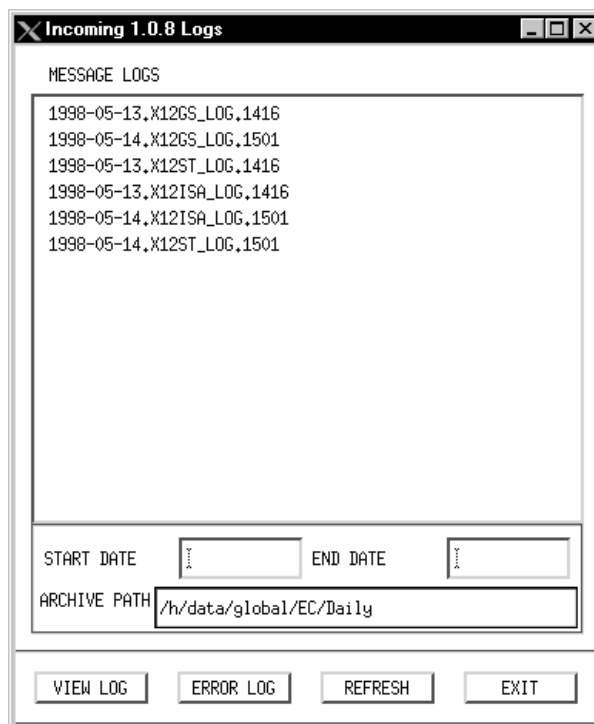
3. Select the log that you wish to view and click **VIEW LOG**. An outgoing message log window appears, displaying the messages contained within the selected log. Note that you may view but not edit the data in the outgoing message log window.

For information on using an outgoing message log window, see Section 4.2 of the *User's Guide for Electronic Commerce Processing Node, Version 1.0.7.5.P8*, April 1997.

### To view pre-2.0 incoming log archives

1. Select **Misc > View Pre-2.0 ILogs Archives**. The **Incoming 1.0.8 Logs** window appears. This window enables you to view incoming message logs that were archived in ECPN Versions 1.0.8-1.0.8.3.

Figure C.0-2 Incoming 1.0.8 Logs Window



2. In the **ARCHIVE PATH** field, enter the path in which the archived logs were placed and press **[Enter]**. Each log archived in the specified path is displayed in the **MESSAGE LOGS** box.

3. You may narrow the range of incoming message logs that are available for viewing by specifying a date range as follows:
  - a. In the **START DATE** field, enter the date of the first incoming message log that you wish to view. Use the YYYY-MM-DD format, where YYYY = the four-digit year, MM = the two-digit month, and DD = the two-digit day. Example: 1998-04-02.
  - b. In the **END DATE** field, enter the date of the last incoming message log that you wish to view, using the YYYY-MM-DD format.
4. To view the contents of an incoming message log, select the log that you wish to view and click **VIEW LOG**. An incoming message log window appears, displaying the messages contained within the selected log. Note that you may view but not edit the data in the incoming message log window.

For information on using an incoming message log window, see Section 3.1 of the *Software User's Guide for Electronic Commerce Processing Node, Version 1.0.8*, June 1997.

5. To view only those messages in an incoming message log that contain errors, select a log in the Incoming 1.0.8 Logs window, and click **ERROR LOG**. An error log window appears, displaying each message from the selected incoming message log that contains errors. Note that you may view but not edit the data in this window.

For information on using an error log window, see Section 3.1 of the *Software User's Guide for Electronic Commerce Processing Node, Version 1.0.8*, June 1997.

## **| To view pre-2.0 outgoing log archives**

1. Select **Misc > View Pre-2.0 OLogs Archives**. The **Outgoing 1.0.8 Logs** window appears. This window has the same format as the **Incoming 1.0.8 Logs** window ([Figure C.0-2](#)) and enables you to view outgoing message logs that were archived in ECPN Versions 1.0.8-1.0.8.3.
2. In the **ARCHIVE PATH** field, enter the path in which the archived logs were placed and press **[Enter]**. Each log archived in the specified path is displayed in the **MESSAGE LOGS** box.

3. You may narrow the range of outgoing message logs that are available for viewing by specifying the starting and ending dates. To specify a starting and ending date range:
  - a. In the **START DATE** field, enter the date of the first outgoing message log that you wish to view. Use the YYYY-MM-DD format, where YYYY = the four-digit year, MM = the two-digit month, and DD = the two-digit day. Example: 1998-04-02.
  - b. In the **END DATE** field, enter the date of the last outgoing message log that you wish to view, using the YYYY-MM-DD format.
4. To view the contents of an outgoing message log, select the log that you wish to view and click **VIEW LOG**. An outgoing message log window appears, displaying the messages contained within the selected log. Note that you may view but not edit the data in the outgoing message log window.

For information on using an outgoing message log window, see Section 3.2 of the *Software User's Guide for Electronic Commerce Processing Node, Version 1.0.8*, June 1997.

5. To view only those messages in an outgoing message log that contain errors, select a log in the **Outgoing 1.0.8 Logs** window, and click **ERROR LOG**. An error log window appears, displaying each message from the selected outgoing message log that contains errors. Note that you may view but not edit the data in this window.

For information on using an error log window, see Section 3.2 of the *Software User's Guide for Electronic Commerce Processing Node, Version 1.0.8*, June 1997.

## To restore pre-2.0.0.3 Oracle archives

---

**NOTE:** In order to view pre-2.0.0.3 Oracle archives, you must first restore the archived daily directories and the Oracle database tables for the records that you wish to view.

- To restore the daily directories, use the Archive/Restore option on the System menu. For more information on the Archive/Restore option, see [Section 2.3](#).
  - To restore the pre-2.0.0.3 Oracle database tables, follow the instructions below.
- 

1. Select Misc > Restore Pre-2.0 Oracle Archives. The `import_msg_list108.sh` window appears.

*Figure C.0-3 import\_msg\_list108.sh Window*



2. Enter the date of the Oracle database table that you wish to restore, using the MM/DD/YYYY format, where MM = the two-digit month, DD = the two-digit day, and YYYY = the four-digit year, and then press [Enter]. Example: 04/02/1998.

The following message appears in the window as the database is restored:

Restoring <name of Oracle database table>. This may take a while.

When the restore process is complete, the following message appears in the window:

N rows successfully restored in <name of Oracle database table>.

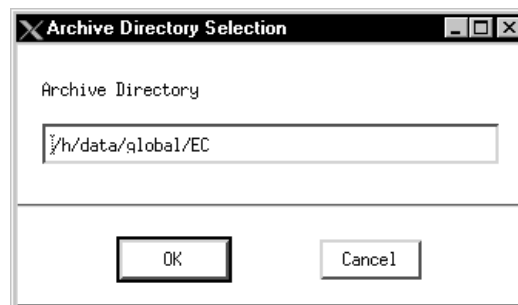
Done.

3. Press [Enter] to exit. Note that you must repeat this procedure for each Oracle processing day that you wish to restore.

### To view pre-2.0.0.3 Oracle archives

1. Once you have restored the archived daily directories and Oracle database tables, select Misc > View Pre-2.0 Oracle Archives. The Archive Directory Selection window appears.

Figure C.0-4 Archive Directory Selection Window



2. The Archive Directory field displays the default archive directory (/h/data/global/EC), where the Oracle archive data is stored. Click OK in this window to continue.

An ECPN database query window appears. Note that you may view but not edit the data in this window. For information on using an ECPN database query window, see Section 6.1 of the *Software User's Guide for Electronic Commerce Processing Node, Version 1.0.8*, June 1997.

This page has been intentionally left blank.

# Appendix D

## Searching Messages

With the ShowTrueMsg utility, you can display the contents of an X12 or UDF message and use the UNIX system’s grep command to search for specific data in the message. To view a message with this utility:

- 1. Open an xterm window.
- 2. Enter the following command and press [Enter]:

```
/h/EC/progs/ShowTrueMsg [-u | -x] <SNNNNNNNN/YYYYMMDD>
```

For this command:

- Use one of the following options, explained in [Table D.0-1](#).

Table D.0-1 Message Search Options

Use	To
-u	Display the UDF associated with a message sequence number (MSN)
-x	Display the X12 associated with an MSN

- Substitute the MSN for SNNNNNNNN/YYYYMMDD (as described in [Table 1.1-2](#)).

For information on using the grep command, consult your UNIX system’s documentation.

This page has been intentionally left blank.



## Appendix E

# Sending Information to the Data Warehouse

---

The Electronic Commerce Data Warehouse (ECDW) program sends a set of specific data each day to the Data Warehouse using the file transport protocol (FTP). The Data Warehouse is a repository of historical data collected for the purpose of analysis.

The ECDW program runs as a cron job once a day. Each time the program runs, it picks up where the last transmission left off and transmits all of the data not previously transmitted, *except* for data that is less than five days old. ECDW does not transmit any data to the Data Warehouse until it is five days old.

Each day's data is sent to the warehouse in this sequence: the message objects, the communications channel database, the trading partner database, and the trading partner database hash table. Once the databases have been sent, a closure file is transmitted to indicate to the warehouse that the data for that day is complete.

The transmitted files are named according to the conventions outlined in [Table E.0-1](#).

*Table E.0-1 File Naming Conventions for Transmitted Data*

Data	File name	Example
message objects	<YYYY-MM-DD>-<S><NNNNNNNN>	1998-08-02-C00000585
communications channel database	<YYYY-MM-DD>- ChannelDB. ndx	1998-08-02-ChannelDB.ndx
trading partner database	<YYYY-MM-DD>-TPDB.ndx	1998-08-02-TPDB.ndx
trading partner database hash table	<YYYY-MM-DD>-TPDB.hash	1998-08-02-TPDB.hash
closure data	<YYYY-MM-DD>-closed	1998-08-02-closed

To view the process log generated by each transmission, select **Misc > Process Logs**, and then view the log named **ecdw**. For additional details on process logs, see [Section 7.1](#).

To run the ECDW program, you must first configure the ECDW script and then run the script as a cron job. You may also run ECDW manually if necessary.

## To configure and run the ECDW script as a cron job

1. At the command prompt, change directories as follows:

```
cd /h/data/global/EC/System
```

2. Verify that the **ecdw\_config** file is in the **System** directory. If it is, proceed to [Step 3](#). If the file is not in the directory, create it as follows:

```
cp ecdw_config.default ecdw_config
```

3. At the command prompt, change the file permissions to read/write as follows:

```
chmod 2755 ecdw_config
```

4. Open the **ecdw\_config** file and then locate the configuration area at the top of the file. Edit the following fields, entering the information as directed:

### HOST

Either the name of the remote Data Warehouse host or its IP address.

### USERNAME

Login name to be used on the remote Data Warehouse host.

### PASSWORD

Login password to be used on the remote Data Warehouse host.

### WORKING\_DIR (optional)

Directory on the remote Data Warehouse host to change to before transmitting data. Enter a directory in this field only if the remote server does not automatically log into the destination directory.

5. Save and exit the `ecdw_config` file.

---

**IMPORTANT:** The entire contents of the crontab entry can be replaced by the `crontab` command. Use extreme caution when completing the following step. Refer to the `cron` and `crontab` man pages for additional information.

---

6. ECDW should be set up to run once a day as a cron job. To do so, the system administrator must create a crontab file with the following entry:

```
* 2 * * * /h/EC/progs/ecdw
```

This command specifies that the ECDW program should run every day at 2:00 a.m. (0200). You may specify another time by replacing the 2.

Each time the cron job runs and data is transmitted successfully, the program makes an entry in the registry file noting which data was transmitted.

### To run ECDW manually

ECDW should be set to run as a cron job; however, you may run the program manually if necessary.

1. Ensure that the ECDW script is configured as described in *To configure and run the ECDW script as a cron job*.
2. At the command prompt, enter this command to run ECDW:

```
ecdw -d <start date> <end date> -s <S>
```

The optional parameters function as described in [Table E.0-2](#).

*Table E.0-2 Optional Parameters for ECDW*

Parameter	Description	Examples
-d <start date> <end date> <sup>1</sup>	<p>Specifies the starting and ending date of the data you wish to send to the Data Warehouse. Substitute the starting and ending dates for &lt;start date&gt; and &lt;end date&gt;, using this format: YYYY-MM-DD. If you specify a starting date less than five days old (from the day you run the program), no data is transmitted.</p> <p>If you specify a starting and an ending date, ECDW transmits data from the starting day and all subsequent days until it reaches the end date or data that is less than five days old.</p> <p>You are not required to specify an ending date, and if you do not, ECDW transmits data for the starting day and all subsequent days until it reaches data that is less than five days old.</p> <p>To send only one day of data, specify the same date for the starting date and the ending date.</p>	-d 1999-02-13 1999-02-16
-s <S> <sup>2</sup>	<p>Specifies the site ID of the message objects that you wish to send to the Data Warehouse. Substitute the one-letter site ID for &lt;S&gt;.</p>	-s C

<sup>1</sup>If you do not use the optional -d parameter, the ECDW program draws on information in the registry file, noting the time and date of the last transmission, and resumes transmission of data from that point until it reaches data that is less than five days old. If there is no record in the registry file of the last transmission, data from the oldest day online is sent. However, if you use the optional -d parameter, you override the starting point in the registry file, so each transmission with this parameter will start at the beginning of that day's data.

<sup>2</sup> **IMPORTANT:** Whenever you send data to the Data Warehouse, you *should* use the -s parameter.

## Appendix F

# Sample Traffic Report

Each day, the system gathers traffic report data for each active channel in the communications channel database. This data includes such information as the total number of files received and transmitted, total RFQs received and processed, and a summary of all transactions processed and transmitted by a channel. When the MsgReporter utility is run (as described in [Appendix J](#) of the *System Administrator's Guide for Electronic Commerce Processing Mode*), this data is generated into a single report for each channel (<channel name>.msgprt). Provided that you have selected the **ENABLE TRAFFIC REPORTS** check box in the edit channel's **ADMIN** tab (as described in [Section 4.1.3](#)), this report will be sent to the specified email address. A sample traffic report is provided in this appendix.

```
Traffic Report for KERMIT on 1999-03-29
Channel Message Type : X12
Received Files Summary
Total number of file Received : 1
      FILENAME      TOR      SIZE
      kermit.send    22:52    9648
Processed X12 Transaction Summary
Total number of ISAs Processed : 1
      ICN      TOP      Filename
      000000018    22:52    kermit.send
Processed X12 Transaction Breakdown
      ICN - 000000018
              GCN - 18      GS03 - R54358902378
              ST - 0018
RFQ Processed Transaction Summary
Total number RFQs received : 0
      GS02      Solicitation Number
Received Transaction Breakdown Summary
      Transaction Type      Total Received
      850      1
Transmitted Files Summary
Total number of file Transmitted : 19
      FILENAME      TOT      SIZE
      /h/data/global/EC/Messages/OutRaw/KERMIT/kermit.0884122  23:01
7311
      /h/data/global/EC/Messages/OutRaw/KERMIT/kermit.0884123  23:01
300
      /h/data/global/EC/Messages/OutRaw/KERMIT/kermit.0884124  23:01
8717
```

```

/h/data/global/EC/Messages/OutRaw/KERMIT/kermit.0884125 23:01
8462
/h/data/global/EC/Messages/OutRaw/KERMIT/kermit.0884126 23:01
2701
/h/data/global/EC/Messages/OutRaw/KERMIT/kermit.0884127 23:01
7245
/h/data/global/EC/Messages/OutRaw/KERMIT/kermit.0884128 23:01
7246
/h/data/global/EC/Messages/OutRaw/KERMIT/kermit.0884129 23:01
9333
/h/data/global/EC/Messages/OutRaw/KERMIT/kermit.0884130 23:01
5040
/h/data/global/EC/Messages/OutRaw/KERMIT/kermit.0884131 23:01
3688
/h/data/global/EC/Messages/OutRaw/KERMIT/kermit.0884132 23:01
9633
/h/data/global/EC/Messages/OutRaw/KERMIT/kermit.0884133 23:01
8457
/h/data/global/EC/Messages/OutRaw/KERMIT/kermit.0884134 23:01
300
/h/data/global/EC/Messages/OutRaw/KERMIT/kermit.0884135 23:01
778
/h/data/global/EC/Messages/OutRaw/KERMIT/kermit.0884136 23:01
7311
/h/data/global/EC/Messages/OutRaw/KERMIT/kermit.0884137 23:01
8717
/h/data/global/EC/Messages/OutRaw/KERMIT/kermit.0884138 23:01
8462
/h/data/global/EC/Messages/OutRaw/KERMIT/kermit.0884139 23:01
7246
/h/data/global/EC/Messages/OutRaw/KERMIT/kermit.0884140 23:01
2701
Transmitted X12 Transaction Summary
Total number of ISAs Transmitted : 20
      ICN          TOP          Filename
      274508208      23:01      /h/data/global/EC/Messages/OutRaw/
KERMIT/kermit.0884122
      SUBADDR:
      274502374      23:01      /h/data/global/EC/Messages/OutRaw/
KERMIT/kermit.0884123
      SUBADDR:
      274514142      23:01      /h/data/global/EC/Messages/OutRaw/
KERMIT/kermit.0884124
      SUBADDR:
      274520276      23:01      /h/data/global/EC/Messages/OutRaw/
KERMIT/kermit.0884125
      SUBADDR:
      274526210      23:01      /h/data/global/EC/Messages/OutRaw/
KERMIT/kermit.0884126
      SUBADDR:

```

274538278	23:01	/h/data/global/EC/Messages/OutRaw/
KERMIT/kermit.0884127		
SUBADDR:		
274532244	23:01	/h/data/global/EC/Messages/OutRaw/
KERMIT/kermit.0884128		
SUBADDR:		
274550246	23:01	/h/data/global/EC/Messages/OutRaw/
KERMIT/kermit.0884129		
SUBADDR:		
274544212	23:01	/h/data/global/EC/Messages/OutRaw/
KERMIT/kermit.0884130		
SUBADDR:		
274556280	23:01	/h/data/global/EC/Messages/OutRaw/
KERMIT/kermit.0884131		
SUBADDR:		
274568248	23:01	/h/data/global/EC/Messages/OutRaw/
KERMIT/kermit.0884132		
SUBADDR:		
274562214	23:01	/h/data/global/EC/Messages/OutRaw/
KERMIT/kermit.0884133		
SUBADDR:		
274580216	23:01	/h/data/global/EC/Messages/OutRaw/
KERMIT/kermit.0884134		
SUBADDR:		
274574182	23:01	/h/data/global/EC/Messages/OutRaw/
KERMIT/kermit.0884135		
SUBADDR:		
274586250	23:01	/h/data/global/EC/Messages/OutRaw/
KERMIT/kermit.0884136		
SUBADDR:		
274592284	23:01	/h/data/global/EC/Messages/OutRaw/
KERMIT/kermit.0884137		
SUBADDR:		
274598218	23:01	/h/data/global/EC/Messages/OutRaw/
KERMIT/kermit.0884138		
SUBADDR:		
274610286	23:01	/h/data/global/EC/Messages/OutRaw/
KERMIT/kermit.0884139		
SUBADDR:		
274604352	23:01	/h/data/global/EC/Messages/OutRaw/
KERMIT/kermit.0884140		
SUBADDR:		
274622254	23:01	/h/data/global/EC/Messages/OutRaw/
KERMIT/kermit.0884141		
SUBADDR:		
Transmitted X12 Transaction Breakdown		
ICN - 274508208		
SUBADDR:		
GCN - 1	GS03 - kermit	
ST - 0017		

ICN - 274502374  
SUBADDR:  
GCN - 1 GS03 - kermit  
ST - 0019

ICN - 274514142  
SUBADDR:  
GCN - 1 GS03 - kermit  
ST - 0038

ICN - 274520276  
SUBADDR:  
GCN - 1 GS03 - kermit  
ST - 0023

ICN - 274526210  
SUBADDR:  
GCN - 1 GS03 - kermit  
ST - 0016

ICN - 274538278  
SUBADDR:  
GCN - 1 GS03 - kermit  
ST - 0021

ICN - 274532244  
SUBADDR:  
GCN - 1 GS03 - kermit  
ST - 0036

ICN - 274550246  
SUBADDR:  
GCN - 1 GS03 - kermit  
ST - 0022

ICN - 274544212  
SUBADDR:  
GCN - 1 GS03 - kermit  
ST - 0015

ICN - 274556280  
SUBADDR:  
GCN - 1 GS03 - kermit  
ST - 0024

ICN - 274568248  
SUBADDR:  
GCN - 1 GS03 - kermit  
ST - 0018

ICN - 274562214  
SUBADDR:  
GCN - 1 GS03 - kermit  
ST - 0037

ICN - 274580216  
SUBADDR:  
GCN - 1 GS03 - kermit  
ST - 0019



ICN - 274574182  
     SUBADDR:  
         GCN - 1           GS03 - kermit  
             ST - 0020  
 ICN - 274586250  
     SUBADDR:  
         GCN - 1           GS03 - kermit  
             ST - 0017  
 ICN - 274592284  
     SUBADDR:  
         GCN - 1           GS03 - kermit  
             ST - 0038  
 ICN - 274598218  
     SUBADDR:  
         GCN - 1           GS03 - kermit  
             ST - 0023  
 ICN - 274610286  
     SUBADDR:  
         GCN - 1           GS03 - kermit  
             ST - 0036  
 ICN - 274604352  
     SUBADDR:  
         GCN - 1           GS03 - kermit  
             ST - 0016  
 ICN - 274622254  
     SUBADDR:  
         GCN - 1           GS03 - kermit  
             ST - 0015

## RFQ Transmitted Transaction Summary

Total number RFQs Transmitted : 0

GS02                      Solicitation Number

## Transmitted Transaction Breakdown Summary

Transaction Type	Total Xmited
997	2
865	2
860	1
855	3
850	1
843	3
840	2
838	1
836	2
824	1
810	2

This page has been intentionally left blank.

## Appendix G

# Routing Documents to the EDA Server

---

This appendix describes how to configure ECPN to deliver Standard Procurement System (SPS) documents to the Electronic Document Access (EDA) server. EDA is a Government web server that provides access to Government-issued contracts. The contracts are stored on the EDA server in Portable Document Format (PDF).

[Figure G.0-1](#) illustrates how documents are routed from SPS to the EDA server. For each contract to be delivered to the EDA server, SPS sends two files to ECPN: a postscript (.ps) file and an index (.idx) file. The postscript file contains the actual contract, and the index file summarizes key information about the contract. ECPN converts the postscript file to PDF, inserts fields required by the EDA server into the index file, sends the PDF file to the EDA web server, and sends the index file to the EDA index server.

*Figure G.0-1 Routing of Documents from SPS to the EDA Server*



Before ECPN can begin the postscript-to-PDF translation process, it must receive the postscript file *and* its corresponding index file. If one file arrives before the other, ECPN places the file in the correlation database. The correlation database serves as a temporary holding place for each file received on an incoming SPS-EDA channel that is waiting for its corresponding file to arrive.

If postscript-to-PDF translation fails, the postscript file is placed in the error queue (described in [Section 3.2](#)) for trouble ticket resolution, and the index file is not modified or sent.

To route documents to the EDA server, you should complete the following sequence of steps:

1. Configure the channels to receive and transmit the files.
2. Configure a route for the incoming files.
3. Monitor the correlation database.

## To configure the incoming and outgoing channels

You must add two channels to the communications channel database: an incoming channel to receive postscript and index files from the SPS-EDA site and an outgoing channel to send PDF and index files to the EDA server.

### Incoming

1. Add a new channel, specifying AIS as the Node Type and FTP as the Interface (as described in *To add a channel* in [Section 4.1](#)).
2. Configure each of the settings for the channel (as described in [Section 4.1](#)). Note that you must set the MESSAGE TYPE in the TRANSLATION tab to SPS-EDA.

### Outgoing

1. Add a new channel, specifying AIS as the Node Type and FTP as the Interface (as described in *To add a channel* in [Section 4.1](#)).
2. Configure each of the settings for the channel (as described in [Section 4.1](#)). Note that you must configure the following settings as indicated:
  - In the FTP TRANSFER tab, select MULTIPLE as the TRANSFER MODE.
  - In the REMOTE 'PUSH TO' PATH AND NAME field of the FTP TRANSFER tab, insert {sxrf} at the beginning of the file name and {eda-fname} at the end of the file name. For a description of these variables, see [Section 4.1.8](#).
  - In the TRANSLATION tab, select EDA-PDF as the MESSAGE TYPE.
3. Edit the System\_Name field in the look-up table for the channel (as described in [Section 4.1.2](#)). The comment portion of the look-up table provides directions on how to edit the field.

## To configure a route for the incoming files

Add a new route to the routing database as explained in [Section 5.1](#). Configure the following settings as indicated:

- From the drop-down list box adjacent to the **SOURCE CHANNEL** field, select either **ALL** or an SPS-EDA type channel.
- In the **CRITERIA** box, select either **FILE/VAN NAME PATTERN** or **ALL**. If you select **FILE/VAN NAME PATTERN**, enter \*.ps in the field.

Note that index files are not routed based on the criteria in the routing database. If you specify **ALL** or \*.ps for the **FILE/VAN NAME PATTERN**, all index files are automatically routed to the same outgoing channel as the associated postscript file.

- From the drop-down list box adjacent to the **DESTINATION CHANNEL** field, select an EDA-PDF type channel.

## To monitor the correlation database

ECPN provides a software program named `CorrDB_text` that enables you to monitor and maintain the correlation database. Note that all commands described in this section are entered in an xterm window. Also note that all of the command arguments are mutually exclusive: You may specify only one of them.

1. To view the contents of the correlation database in the xterm window (standard output), enter `CorrDB_text`.
2. To print an entry's received file content to standard output:
  - a. Determine the number of the entry in the database by executing [Step 1](#) and locating the number in the first column of the printout.
  - b. Enter `CorrDB_text -v n`, where `n` = the number of the entry in the database. You may also use a redirect symbol (`>`) to save the file or use a pipe symbol (`|`) to send the file to an application, such as Acrobat Distiller, a formatting program.
3. To request the generation of an **UNCORRELATED FILE** alert (described in [Appendix B](#)) for each entry in the correlation database older than `n` hours, enter `CorrDB_text -a [n]`. If you do not specify a value for `n`, the default value of 1 hour is used.

4. To request the automatic generation of an **UNCORRELATED FILE** alert once daily for each unmatched entry in the correlation database, run `CorrDB_text` as a cron job. To do so, the system administrator must create a crontab file with an entry similar to the following:

```
30 16 * * * /h/EC/progs/CorrDB_text -a 24
```

This command directs the `CorrDB_text` program to check the correlation database daily at 4:30 p.m. (30 16) for each file that has been waiting 24 hours or more for its corresponding file and to generate an **UNCORRELATED FILE** alert for each such file.

5. To delete an entry from the database:
  - a. Determine the number of the entry in the database by executing [Step 1](#) and locating the number in the first column of the printout.
  - b. Enter `CorrDB_text -d n`, where `n` = the number of the entry in the database.

## Appendix H

# Importing Data from Spreadsheets

---

You can import data from a spreadsheet into one of three ECPN databases — the communications channel database, the routing database, and the trading partner database. You have the option of replacing the data in the current database with the new data or appending the new data to the existing data in the database. To import data, you should complete this sequence of steps:

1. Archive the database, as instructed in [Section 4.7](#) of the *System Administrator's Guide for Electronic Commerce Processing Node*.
2. Arrange the data columns in the spreadsheet, as directed in [To format data](#).
3. Save the spreadsheet as a comma-delimited file, according to the instructions for the spreadsheet software you are using.
4. Import data from the file into the database, as explained in [To import data](#).

### To format data

Before importing data, you must perform two checks in the spreadsheet. First, you must verify that the spreadsheet has a header row. Second, you must ensure that the data columns in the spreadsheet are arranged in a certain order so that the database is populated correctly. For the required column order for a database, consult the appropriate table:

- Communications channel database – [Table H.0-1](#)
- Routing database – [Table H.0-2](#)
- Trading partner database – [Table H.0-3](#)

### Communications channel database

[Table H.0-1](#) lists the required column order for the communications channel database. For a detailed description of the information in each column, see [Section 4.1](#).

When you import data into the communications channel database, the conversion program only imports data from the fields that are valid for an interface; so, for instance, for a CLEO channel, columns 9, 10, and 11 would not be checked.

*Table H.0-1 Column Order for the Communications Channel Database*

Column number	Information	Value
1	NAME	Defined by user
2	XREF	Defined by user
3	TYPE	VAN, GW, AIS, or CCR
4	INTERFACE	FTP, CLEO, Kermit, Email, or ZMODEM
5	MSG TYPE	X12 or any valid UDF type, such as SAACONS
6	STARTUP	Auto or Manual
7	XMIT-ONLY	Yes or No
8	THRESHOLD	Defined by user
9	IP ADDRESS	Defined by user
10	LOGIN NAME	Defined by user
11	PASSWORD	Defined by user



### Routing database

[Table H.0-2](#) lists the required column order for the routing database. For a detailed description of the information in each column, see [Section 5.1](#).

*Table H.0-2 Column Order for the Routing Database*

Column number	Information	Value
1	SRC CHANNEL	Defined by user
2	ROUTE BY	File/VAN name pattern, ISA/GS To, or All
3	CRITERIA	Defined by user
4	USE CASE	Yes or No
5	DES CHANNEL	Defined by user
6	ACTIVE	Yes, No

### Trading partner database

[Table H.0-3](#) lists the required column order for the trading partner database. For a detailed description of the information in each column, see [Section 5.2](#).

When data is imported into the trading partner database, the conversion program checks that the Commercial and Government Entity (CAGE) code and Data Universal Numbering System (DUNS) code are unique and that the ISA Qualifier is valid. If a violation occurs, a warning is issued, and the data is not inserted into the database.

*Table H.0-3 Column Order for the Trading Partner Database*

Column number	Information	Value
1	NAME	Defined by user
2	VAN	Defined by user
3	CAGE #	Defined by user
4	DUNS #	Defined by user
5	DODAAC	Defined by user
6	GS ADDRESS	Defined by user
7	ISA QUALIFIER	Defined by user
8	ISA ADDRESS	Defined by user

## To import data

After you have archived the database, arranged the data correctly, and saved the spreadsheet as a comma-delimited file, you can import the data into one of the databases.

1. Stop the ECPN processes, as explained in [Section 4.2](#) of the *System Administrator's Guide for Electronic Commerce Processing Node*.
2. At the command prompt, enter this command to import data from a spreadsheet into a database:

```
csv_to_db -o [-c|-r|-t] <spreadsheet file name>
```

The optional parameters function as described in [Table H.0-4](#).

*Table H.0-4 Optional Parameters for Importing Data*

Parameter	Description
-o	Overwrites the existing database. If you do not specify this option, the data is automatically appended to the database.
-c*	Imports data to the communications channel database
-r*	Imports data to the routing database
-t*	Imports data to the trading partner database

\*The -c, -r, and -t options are mutually exclusive: You can specify only one of them.

3. Restart the ECPN processes, as explained in [Section 4.2](#) of the *System Administrator's Guide for Electronic Commerce Processing Node*.

## Appendix I

# Viewing COOP Data

---

During a Continuity of Operations (COOP), messages intended for a site that is not online are redirected to another site. This COOP data remains in the databases of the site that assumed communications for the other site. However, using the `coop_archive` and `coop_extract` scripts, this data can be archived and sent to the site for which the COOP was performed, where it can be restored for viewing purposes. The `coop_archive` script enables the site that performed the COOP to archive and send the message log, error queue, and message database tables that were intended for the other site. The `coop_extract` script enables the site, for which the COOP was performed, to restore this data for viewing.

This section describes how to use the `coop_archive` and `coop_extract` scripts to [archive](#) and [restore](#) COOP data.

### To archive COOP data

1. Stop the ECPN processes, as explained in [Section 4.2](#) of the *System Administrator's Guide for Electronic Commerce Processing Node*.
2. At the command line, enter the following command, substituting the processing day that you wish to archive for the information in angle braces. Note that you should *not* run this script while data for the specified day is being processed.

```
coop_archive <YYYY-MM-DD>
```

Note that you can specify more than one day in the command, using a single space to separate each day. For example, to archive the directories for 4 May 1999 and 5 May 1999, enter the command as follows:

```
coop_archive 1999-05-04 1999-05-05
```

3. When the script has finished, restart the ECPN software, as explained in [Section 4.2](#) of the *System Administrator's Guide for Electronic Commerce Processing Node*.

The script creates an archive file, `/h/coop_data.tar`, which can be sent to the site for which you performed the COOP.

## To restore COOP data for viewing

1. Create a temporary directory in which to extract the `coop_data.tar` file, and place the tar file in the temporary directory.
2. At the command line, enter the following command, substituting for the angle braces the full path to the temporary directory (e.g., `/tmp`). Note that you do *not* need to stop ECPN processes to run this script.

```
coop_extract<full path to directory>/coop_archive.tar
```

When the script is completed, the message log, error queue, and message database tables from the site that performed the COOP is imported into the local system. Note that this data is available for viewing only; therefore, these messages can *not* be rerouted, retranslated, or edited.

# Software User's Guide for ECPN

## Index

---

### Symbols

> symbol, use of, [1-28](#)

### Numerics

824 acknowledgement messages, [1-8, 3-8, 3-11, 3-16](#)  
    configuring channels for, [4-35](#)  
997 acknowledgement messages, [3-8, 3-30](#)  
    configuring channels for, [4-35](#)  
    correlating with source messages, [2-5](#)  
    creation of, [1-9](#)

### A

access keys, using, [1-16](#)  
acknowledgement messages  
    824, [1-8, 3-8, 3-11, 3-16](#)  
        configuring channels for, [4-35](#)  
    997, [1-9, 3-8, 3-30](#)  
        configuring channels for, [4-35](#)  
    identifying messages as, [3-8](#)  
    origin of from address, [2-3](#)  
action summary, [3-9](#)  
administrative information, specifying, [2-5](#)  
AIS, [1-2](#)  
alert box, using, [1-25](#)  
alert display filter, editing, [6-6](#)  
Alert Display Filter option, [6-6](#)  
alert log  
    acknowledging alerts, [6-4](#)  
    capacity of, [6-2](#)  
    description of alert statements, [B-1 to B-13](#)  
    viewing, [6-2](#)  
Alert Log option, [6-2](#)  
alert notification database  
    adding entries, [6-10](#)  
    caution, [6-11](#)  
    deleting entries, [6-12](#)  
    editing entries, [6-12](#)  
    viewing, [6-9](#)  
Alert Notification DB option, [6-9, 6-13](#)  
alert notification messages  
    sender field, [2-3](#)  
    viewing, [6-13](#)

### alerts

    acknowledging, [6-4](#)  
    beeper notification, [6-11](#)  
    classes, [6-6](#)  
    email notification, [6-11](#)  
    generated for a message, [3-10](#)  
    non-urgent, [6-5](#)  
    non-urgent, viewing, [1-25](#)  
    notification messages, writing, [6-13](#)  
    overview of, [B-1](#)  
    recommended actions for, [B-2 to B-13](#)  
    segtterm conflict, [4-39](#)  
    segtterm failure, [4-40](#)  
    setting up, [6-6](#)  
    urgent, [6-4](#)  
    viewing log, [6-2](#)  
Alerts menu, overview of, [6-1](#)  
American National Standards Institute. *See* ANSI  
ANSI, [1-2](#)  
Archive/Restore option, [2-8](#)  
archives  
    viewing pre-1.0.8 incoming logs, [C-2](#)  
    viewing pre-1.0.8 outgoing logs, [C-2](#)  
    viewing pre-2.0.0.3 Oracle, [C-7](#)  
    viewing pre-2.0 incoming logs, [C-3](#)  
    viewing pre-2.0 outgoing logs, [C-4](#)  
archiving  
    daily directories  
        description of, [2-8](#)  
        procedure for, [2-10](#)  
        viewing files available for, [2-9](#)  
    database contents, [1-24](#)  
Automated Information Systems. *See* AIS

### B

beeper, alert notification via, [6-11](#)

### C

CAGE code, defined, [5-9](#)  
cautions  
    system setup, [2-2](#)

- channel logs
  - archiving and restoring, [2-8](#)
  - incoming, [1-4](#)
  - outgoing, [1-6](#), [1-10](#)
- channel queues
  - outgoing, [1-6](#), [1-9](#)
- channels
  - activating transmit-only mode, [4-20](#)
  - adding, [4-21](#)
  - administration settings, [4-34](#)
  - character conversion settings, [4-37](#)
  - CLEO settings, [4-43](#)
  - communications scheduler, [4-25](#)
  - configuring for acknowledgements, [4-35](#)
  - configuring for traffic reports, [4-34](#)
  - database, viewing, [4-3](#)
  - deactivating transmit-only mode, [4-20](#)
  - defined, [1-3](#)
  - deleting, [4-22](#)
  - editing, [4-23](#)
  - editing scripts, [4-65](#)
  - email
    - starting and stopping, [4-4](#)
  - email settings, [4-46](#)
  - FTP remote login settings, [4-50](#)
  - FTP transfer parameters, [4-52](#)
  - general settings, [4-24](#)
  - interface types, [4-22](#)
  - Kermit settings, [4-59](#)
  - logs
    - incoming, [4-10](#)
    - outgoing, [4-14](#)
  - naming, [4-24](#)
  - node types, [4-21](#)
  - outgoing queue (non-email), [4-18](#)
  - outgoing queues
    - email, [4-19](#)
  - POC information, [4-42](#)
  - session logs, viewing, [4-8](#)
  - setting interface, [4-24](#)
  - setting node for, [4-24](#)
  - starting, [4-8](#)
  - status of, [4-67](#) to [4-69](#)
  - stopping, [4-8](#)
  - transaction grouping, [4-40](#)
  - translating map settings, [4-27](#)
  - user-entered notes, [4-42](#)
  - ZMODEM settings, [4-62](#)
  - See also* communications channel database
- characters
  - conversion settings, [4-37](#)
  - wildcard, [1-24](#)
- CLEO channels
  - description, [4-22](#)
  - script, default, [A-13](#) to [A-18](#)
- Close All option, [2-12](#)
- columns
  - headings
    - rearranging, [1-20](#)
  - sorting, [1-21](#)
- command files, [4-65](#)
- Commercial and Government Entity code. *See* CAGE code
- common tasks, [1-13](#)
- communications channel database
  - activating transmit-only mode for channels, [4-20](#)
  - adding channels, [4-21](#)
  - deactivating transmit-only mode for channels, [4-20](#)
  - defined, [4-2](#)
  - deleting channels, [4-22](#)
  - editing channels, [4-23](#)
  - importing data from spreadsheets, [H-1](#) to [H-4](#)
  - outgoing queues (email channels), [4-19](#)
  - outgoing queues (non-email channels), [4-18](#)
  - starting channels, [4-8](#)
  - stopping channels, [4-8](#)
  - viewing incoming channel logs, [4-10](#)
  - viewing outgoing channel logs, [4-14](#)
  - viewing session logs, [4-8](#)
- communications channels, *see* channels
- communications error indicator, [3-20](#)
- Communications Manager option, [4-2](#)
- Communications menu, overview of, [4-1](#)
- communications scheduler, using, [4-25](#)
- communications session, defined, [1-3](#)
- Communications Status option, [4-67](#)
- Computer Software Configuration Item. *See* CSCI
- connection failure threshold, setting for email, [3-26](#)
- Continuity of Operations. *See* COOP
- control numbers
  - GCNs, [2-4](#)
  - ICNs, [2-4](#)
- conventions, documentation, [1-28](#)
- COOP, [2-3](#), [4-6](#)
- correlation
  - incoming 997s with original messages, [2-5](#)
- correlation database, [G-1](#)
  - monitoring, [G-3](#)
- counter, viewing next available, [4-24](#)
- CSCI, [1-1](#)

**D**

daily directories

- archiving
  - procedure for, [2-10](#)
  - viewing files available for, [2-9](#)
- deleting, [2-11](#)
- description of, [2-8](#)
- restoring
  - procedure for, [2-10](#)
  - viewing files available for, [2-9](#)

data

- importing from spreadsheets, [H-1](#)
- searching for, [1-22](#)
- sorting, [1-21](#)
- viewing on a remote host, [1-24](#)

data, archiving. *See* archiving

data, working with, [1-20](#) to [1-24](#)

databases

- communications channels, [4-2](#)
- contents, archiving, [1-24](#)
- tracing user modifications to, [2-6](#)

Databases menu, overview of, [5-1](#)

Data Universal Numbering System code. *See* DUNS code

Data Warehouse

- overview of, [E-1](#)

dates

- changing for logs, [1-25](#)
- format of, [1-29](#)

decoding error indicator, [3-20](#)

default printer, [1-26](#)

deleting

- daily directories, [2-11](#)

Department of Defense Address Activity Code. *See* DODAAC

DODAAC, [5-11](#)

dial-up communications, overview of, [A-1](#)

directories. *See* daily directories

documentation conventions, [1-28](#)

documents

- accessing online, [1-25](#)
- routing to EDA server, [G-1](#)

DODAAC, [5-11](#)

domain

- connection failure, [3-24](#)
- defined, [3-23](#)
- queues, [3-23](#) to [3-26](#)

drop-down list boxes

- selecting from, [1-21](#)

DUNS code, [5-9](#)

**E**

EC, [1-1](#)

ECDW. *See* Electronic Commerce Data Warehouse

ecedi mailbox, [3-27](#)

ECI, [1-2](#)

ECPN, [1-1](#)

ECPN Default role, [1-11](#)

ECPN homepage

- viewing Interface Status, [8-3](#)
- viewing message database, [8-5](#)
- viewing user guides, [8-5](#) to [8-5](#)

ECPN Homepage option, [8-2](#)

ECPN system

- actions, tracking, [7-2](#)
- common tasks, [1-13](#)
- exiting, [2-13](#)
- overview, [1-2](#)
- setting up, [2-2](#)
- tracing user modifications to, [2-6](#)

EDA server

- routing documents to, [G-1](#)

EDI, [1-1](#), [1-2](#)

editing an entry, [1-21](#)

Electronic Commerce. *See* EC

Electronic Commerce Data Warehouse (ECDW) program

- configuring, [E-2](#)
- overview of, [E-1](#)
- running as a cron job, [E-3](#)
- running manually, [E-3](#)

Electronic Commerce Infrastructure. *See* ECI

Electronic Commerce Processing Node. *See* ECPN

Electronic Data Interchange. *See* EDI

Electronic Document Access. *See* EDA server

element separator

- defined, [3-7](#), [4-37](#)

email

- alert notification message, [6-13](#)
- alert notification via, [6-11](#)
- domains
  - setting connection failure threshold, [3-26](#)
  - viewing messages queued to, [3-25](#)
- outgoing queues, [3-23](#) to [3-26](#)
- outgoing queues, accessing, [3-23](#)
- rejected
  - accessing mailbox, [3-27](#)
  - deleting, [3-29](#)
  - reinjecting, [3-29](#)
  - viewing messages, [3-28](#)

email channels

- description, [4-22](#)
- starting and stopping, [4-4](#)

email messages

- reply to field, [2-3](#)

entries

- selecting, [1-20](#), [1-21](#)
- unselecting, [1-20](#)

errored messages

- See also* error queue

errored messages, summary, [3-8](#)  
 error queue  
   annotating messages, [3-21](#)  
   defined, [3-18](#)  
   deleting errored messages, [3-21](#)  
   rerouting errored messages, [3-21](#)  
   retranslating errored messages, [3-21](#)  
   translating messages, [3-22](#)  
   viewing, [3-19](#)  
   viewing JDS for messages, [3-21](#)  
   viewing raw messages, [3-20](#)  
 Error Queue option, [3-18](#)  
 errors in messages  
   communications, [3-20](#)  
   decoding, [3-20](#)  
   rerouting, [3-10](#), [3-21](#)  
   retranslating, [3-11](#), [3-21](#)  
   routing, [3-20](#)  
   translation, [3-20](#)  
   translation toolbox, [3-13](#) to [3-17](#)  
   viewing, [3-19](#)  
 exiting ECPN software, [2-13](#)  
 Exit option, [2-13](#)

## F

file names  
   variables in, [4-53](#)  
 files  
   retransmitting, [4-15](#)  
 FTP channels  
   description, [4-22](#)  
   naming files, [4-53](#)

## G

gateway, [1-2](#)  
 GCNs, specifying range, [2-4](#)  
 greater than symbols, use of, [1-28](#)  
 Greenwich Mean Time (GMT), [7-4](#)  
 GS control numbers. *See* GCNs  
 GS summary, [3-9](#)  
 GW, [1-2](#)

## H

help, viewing online, [1-25](#)  
 Help menu, overview of, [8-1](#)  
 homepage. *See* ECPN homepage  
 host, remote, [1-24](#)  
 hot keys. *See* shortcut keys

## I

ICNs, specifying range, [2-4](#)  
 incoming channel logs, [1-4](#), [1-7](#), [4-10](#)

incoming messages  
   UDF, [1-7](#) to [1-8](#)  
   X12, [1-4](#) to [1-5](#)  
 incoming queues  
   translation, [3-33](#) to [3-34](#)  
   X12, [3-30](#) to [3-32](#)  
 incoming translation queue  
   contents of, [3-33](#)  
   viewing, [3-33](#)  
 Incoming Translation Queue option, [3-33](#)  
 incoming X12 queue  
   explanation of contents, [3-30](#)  
   viewing, [3-30](#)  
 Incoming X12 Queue option, [3-30](#)  
 interfaces  
   configuring, [4-2](#)  
   types, [4-22](#)  
 IPC message group summary, [3-9](#)  
 ISA control numbers. *See* ICNs  
 ISA receiver identifier  
   defined, [4-37](#)  
 ISA receiver qualifier  
   defined, [4-37](#)  
 ISA sender identifier  
   defined, [4-37](#)  
 ISA sender qualifier  
   defined, [4-37](#)

## J

JDS (Journal Data Summary)  
   action summary, [3-9](#)  
   general message data, [3-7](#)  
   GS summary, [3-9](#)  
   IPC message group summary, [3-9](#)  
   message annotation, [3-8](#)  
   message errors, summary, [3-8](#)  
   message links, [3-8](#)  
   viewing, [3-6](#)  
 Journal Data Summary. *See* JDS

## K

keeper. *See* message group keeper  
 Kermit channels  
   description, [4-22](#)  
   naming files, [4-60](#)  
   script, default, [A-2](#) to [A-6](#)  
 keys  
   access, using, [1-16](#)  
   shortcut, using, [1-17](#)

## L

links, message, [3-8](#)  
 list boxes, drop down, [1-21](#)



list entries  
     selecting all, 1-20  
     unselecting all, 1-20  
 local prefix, entering, 2-3  
 Logical Maps, 4-31  
 logs  
     viewing for other dates, 1-25  
 logs. *See specific log names*  
 long distance prefix, entering, 2-3  
 look-up tables  
     editing, 4-29

**M**

mailboxes  
     ecedi  
         rejected, 3-27 to 3-29  
 main menu bar  
     navigating, 1-14  
     options  
         Alerts, 6-1  
         Communications, 4-1  
         Databases, 5-1  
         Help, 8-1  
         Messages, 3-1  
         Misc, 7-1  
         System, 2-1  
     overview of, 1-11  
 map families  
     contents of, 4-28  
     location of, 4-29  
 menus  
     main menu bar, 1-14  
     pop-up, 1-15  
     pull-down, 1-14  
     working with, 1-14 to 1-15  
 Mercator program, 3-15  
 message database  
     activating new search, 5-21  
     closing window, 5-21  
     description of, 5-14  
     exiting option, 5-21  
     searching for data, 5-15 to 5-18  
     viewing dates online, 5-20  
     viewing JDS from, 5-18  
     viewing transaction data, 5-18  
 Message DB option, 5-14  
 message group keeper, definition of, 3-9  
 Message Log option, 3-2

message logs, 1-5, 2-8  
     annotating messages, 3-12  
     defined, 3-2  
     display limits of, 3-3  
     requesting message range, 3-4  
     rerouting errored messages, 3-10  
     retranslating errored messages, 3-11  
     translating messages, 3-13 to 3-17  
     viewing, 3-2 to 3-3  
     viewing JDS for messages, 3-6  
     viewing raw messages, 3-5  
 message objects  
     defined, 1-5  
 message processing  
     defined, 1-3  
     description of, 1-2  
 message reports, 2-8  
     origin of from address, 2-3  
 message reports. *See* traffic reports  
 messages, 2-8  
     action summary, 3-9  
     alerts generated for, 3-10  
     annotating, 3-12, 3-21  
     annotations  
         summary of, 3-8  
     archives. *See* archives  
     correlating  
         incoming 997s with original messages, 2-5  
     deleting from error queue, 3-21  
     errors  
         rerouting, 3-10, 3-21  
         retranslating, 3-11, 3-21  
         viewing, 3-19  
     errors in messages  
         summary, 3-8  
     exchange between government and industry, 1-2  
     GS summary, 3-9  
     IPC message summary, 3-9  
     links between, 3-8  
     outgoing email queues, 3-23 to 3-26  
     rejected email, 3-27 to 3-29  
     requesting range of, 3-4  
     retransmitting, 4-15  
     routing, 5-2  
     searching for data, D-1  
     translating, 3-13 to 3-17  
     types  
         UDFs, definition of, 1-2  
         X12s, definition of, 1-2  
     viewing JDS, 3-6  
     viewing raw, 3-5  
     *See also* errored messages, error queue  
 messages, email  
     reply to field, 2-3

message sequence number. *See* MSN  
 Messages menu, overview of, [3-1](#)  
 message tables, [2-8](#)  
 Misc menu, overview of, [7-1](#)  
 MsgReporter utility, [3-30](#), [4-35](#), [F-1](#)  
 MSN  
     defined, [1-5](#)  
 MSN, format of, [3-3](#)

## N

Netscape, using for online help, [1-25](#)  
 node types, [4-21](#)  
 non-urgent alerts, acknowledging, [6-5](#)  
 notes, adding to messages, [3-21](#)  
 notification, alert database  
     adding entries, [6-10](#)  
     caution, [6-11](#)  
     deleting entries, [6-12](#)  
     editing entries, [6-12](#)  
     viewing, [6-9](#)  
 notifications, alert  
     sender field, [2-3](#)

## O

online documents, accessing, [1-25](#)  
 outgoing channel logs, [1-10](#), [4-14](#)  
     retransmitting files, [4-15](#)  
 outgoing channel queues, [1-6](#), [1-9](#)  
 Outgoing Email Queues option, [3-23](#)  
 outgoing messages  
     UDF, [1-9](#) to [1-10](#)  
     X12, [1-6](#)  
 outgoing queues  
     email, [4-19](#)  
     non-email, [4-18](#)  
     translation, [3-35](#) to [3-36](#)  
 outgoing translation queue  
     contents of, [3-35](#)  
     viewing, [3-35](#)  
 Outgoing Translation Queue option, [3-35](#)

## P

PDF, [G-1](#)  
 pop-up menus, opening, [1-15](#)  
 Portable Document Format. *See* PDF  
 premap, defined, [3-16](#)  
 printing reports, [1-26](#)  
 Print option, [1-26](#)  
 process logs, [2-8](#)  
     viewing, [7-2](#)  
     viewing contents of a log, [7-3](#)  
 Process Logs option, [7-2](#)  
 pull-down menus, opening, [1-14](#)

## Q

queues  
     error, [3-19](#)  
     incoming translation, [3-33](#)  
     incoming X12, [3-30](#)  
     outgoing channel, [4-18](#)  
     outgoing email, [4-19](#)  
     outgoing translation, [3-35](#)  
 queues, outgoing email, [3-23](#) to [3-26](#)  
 quitting ECPN, [2-13](#)

## R

raw messages, viewing, [3-5](#)  
 refreshing, [1-19](#)  
 rejected email  
     accessing mailbox, [3-27](#)  
     deleting, [3-29](#)  
     reinjecting, [3-29](#)  
     viewing messages, [3-28](#)  
 rejected email mailbox, [3-27](#) to [3-29](#)  
 Rejected Email option, [3-27](#)  
 remote host  
     viewing data on, [1-24](#)  
 reply route, setting, [4-25](#)  
 reports, printing, [1-26](#)  
 rerouting messages, [3-10](#), [3-21](#)  
 restoring  
     daily directories  
         procedure for, [2-10](#)  
     pre-2.0.0.3 Oracle archives, [C-6](#)  
 retranslated messages, [3-8](#)  
 retranslating messages, [3-11](#), [3-21](#)  
 retransmitting files, [4-15](#)  
 role box, [1-25](#)  
 roles, [1-11](#)  
     changing, [1-25](#)  
 router  
     incoming UDF processing, [1-8](#)  
     incoming X12 processing, [1-5](#), [3-30](#)  
     rerouting errored messages, [3-10](#)  
 router queue, [1-4](#), [1-8](#)  
 routing  
     error indicator, [3-20](#)  
 routing database  
     activating entries, [5-4](#)  
     adding an entry, [5-4](#)  
     deactivating entries, [5-4](#)  
     deleting an entry, [5-7](#)  
     editing, [5-7](#)  
     importing data from spreadsheets, [H-1](#) to [H-4](#)  
     viewing, [5-3](#)  
 Routing DB option, [5-2](#)  
 routing messages, [5-2](#)

**S**

## scripts

CLEO channels, [A-13 to A-18](#)editing, [4-65](#)caution, [A-1](#)Kermit, [A-2 to A-6](#)sample .ini file, [A-6 to A-7](#)local prefix, specifying, [2-3](#)long dist prefix, specifying, [2-3](#)

ZMODEM

sample .ini file, [A-11 to A-12](#)ZMODEM channels, [A-8 to A-10](#)

## segment terminator

defined, [3-7, 4-37](#)selecting, [1-20](#)

## session logs

archiving and restoring, [2-8](#)viewing, [4-8](#)shortcut keys, using, [1-17](#)ShowTrueMsg utility, [D-1](#)site email address, specifying, [2-3](#)site ID, specifying, [2-2](#)site information, specifying, [2-2](#)site name, specifying, [2-3](#)site sender ID, specifying, [2-3](#)site sender qualifier, specifying, [2-3](#)software upgrade, [2-8](#)

## sorting

column headings, [1-20](#)columns of data, [1-21](#)

## spreadsheets

importing data from, [H-1](#)Standard Procurement System (SPS) documents, [G-1](#)status bar, [1-18](#)

## subelement separator

defined, [3-7, 4-37](#)system, setting up, [2-2](#)system actions, tracking, [7-2](#)System Log option, [2-6](#)system logs, [2-8](#)System menu, overview of, [2-1](#)System Setup option, [2-2](#)**T**tabs, selecting, [1-19](#)tasks, common, [1-13](#)tasks, performing common, [1-25 to 1-27](#)

## text boxes

replacing data in, [1-23](#)Time Zone Conversion option, [7-4](#)time zones, calculating, [7-4](#)title bar, [1-18](#)

toolbox, translation

using, [3-13 to 3-17](#)TP, [1-2](#)

TPDB

look-up errors, [3-11](#)trading partner, [1-2](#)

trading partner database

automatically adding partners, [5-8](#)deleting partners, [5-11](#)editing partners, [5-11](#)importing data from spreadsheets, [H-1 to H-4](#)manually adding partners, [5-10](#)viewing, [5-9](#)viewing transaction history of partners, [5-12](#)trading partner database. *See* TPDBTrading Partner DB option, [5-8](#)

## traffic reports

configuring channels for, [4-34](#)contents of, [4-34](#)defined, [4-34](#)sample, [F-1](#)transaction grouping, [4-40](#)

## translation

error indicator, [3-20](#)files generated by, [3-15](#)audit log, [3-15, 3-16](#)trace file, [3-15, 3-16](#)IPC messages, group summary, [3-9](#)retranslating errored messages, [3-11](#)setting up, [2-4](#)translation queue, [1-8, 1-9](#)

## translation toolbox

defined, [3-13](#)using, [3-13 to 3-17](#)translator, [1-8, 1-9](#)incoming queues, [3-33 to 3-34](#)incoming UDF processing, [3-33 to 3-34](#)incoming UDFs, processing, [1-8](#)look-up tables, [4-29](#)outgoing UDF processing, [3-35 to 3-36](#)processing X12s, [1-9](#)

## transmit-only

activating, [4-20](#)deactivating, [4-20](#)

## troubleshooting tools

system log, [2-6](#)

## U

### UDF messages

- definition of, [1-2](#)
- incoming, [3-33](#) to [3-34](#)
- incoming queue of, [3-33](#)
- look-up tables, [4-29](#)
- map description files, [4-29](#)
- map files, [4-27](#)
- outgoing, [3-35](#) to [3-36](#)
- paths
  - incoming, [1-7](#) to [1-8](#)
  - outgoing, [1-9](#) to [1-10](#)
- processing, [1-7](#) to [1-10](#)
- processing by translator, [1-8](#)

### UDF Specifications, [4-31](#)

### urgent alerts, acknowledging, [6-4](#)

### User's Guide

- documentation conventions, [1-28](#)
- introduction to, [1-1](#)
- overview of, [1-11](#)

### user defined file. *See* UDF

### user modifications

- tracing, [2-6](#)

## V

### Value Added Network. *See* VAN

### VAN, [1-2](#)

## W

### wildcard characters, using, [1-24](#)

### windows

- closing, [1-19](#)
- closing all, [2-12](#)
- columns, rearranging, [1-20](#)
- data
  - searching for, [1-22](#)
- opening, [1-18](#)
- printing reports, [1-26](#)
- refreshing data, [1-19](#)
- resizing window box, [1-20](#)
- selecting all entries, [1-20](#)
- selecting entry for editing, [1-21](#)
- selecting item from list box, [1-21](#)
- sorting columns, [1-21](#)
- standard buttons, [1-19](#)
- status bar, description of, [1-18](#)
- tabs, selecting, [1-19](#)
- text boxes
  - replacing data in, [1-23](#)
- title bar, description of, [1-18](#)
- unselecting all entries, [1-20](#)
- wildcard characters, [1-24](#)

### windows, working with, [1-18](#) to [1-20](#)

## X

### X12 files

- defined, [3-30](#)
- incoming, [3-30](#) to [3-32](#)
- processing, [3-30](#)

### X12 Implementation Conventions, [4-31](#)

### X12 messages

- correlating with incoming 997s, [2-5](#)
- defined, [3-30](#)
- definition of, [1-2](#)
- incoming, [3-30](#) to [3-32](#)
- incoming queue of, [3-30](#)
- outgoing queue of, [3-35](#)
- paths
  - incoming, [1-4](#) to [1-5](#)
  - outgoing, [1-6](#) to [1-6](#)
- processing, [1-4](#) to [1-6](#), [3-30](#)
- processing by router, [1-5](#)
- processing by translator, [1-9](#)

## Y

### YYYY-MM-DD format, [1-29](#)

## Z

### ZMODEM channels

- description, [4-22](#)
- naming files, [4-63](#)
- script, default, [A-8](#) to [A-10](#)

# ECPN

## Document Comment Form

We would like to know your comments and suggestions regarding this document. With your help, we will be able to make improvements to this and other ECPN documents in the future.

Please rate each of the following items by circling a response:

	POOR	FAIR	GOOD	VERY GOOD	EXCELLENT
1) Helpfulness	1	2	3	4	5
2) Accuracy	1	2	3	4	5
3) Readability	1	2	3	4	5
4) Organization	1	2	3	4	5
5) Easy to Understand	1	2	3	4	5

Please check your response to each of the following items:

- |                                                            |                              |                             |
|------------------------------------------------------------|------------------------------|-----------------------------|
| 6) Does the document contain enough figures/illustrations? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 7) Is the level of detail adequate?                        | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 8) Does the document meet your needs as a reference guide? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

Please respond to each of the following questions:

- 9) What is missing from this document?

---

---

---

- 10) What do you like about this document?

---

---

---

---

- 11) What do you dislike about this document?

---

---

---

---

Please enter any additional comments or suggestions in the space below.

---

---

---

---

---

---

Date: \_\_\_\_\_  
Name: \_\_\_\_\_  
Position/Title: \_\_\_\_\_  
Address: \_\_\_\_\_  
City/State: \_\_\_\_\_

This form is ready to be mailed to the address printed on the reverse. Just fold and seal this form with tape or staples, affix a stamp, and mail it. Or, if you prefer, place this form in an envelope and address the envelope for mailing.

---

FOLD

Place  
Stamp  
Here

Documentation Manager  
Inter-National Research Institute, Inc.  
12350 Jefferson Avenue, Suite 400  
Newport News, VA 23602

---

FOLD